

### Legend

- Sulphur Dioxide Attainment with a Maintenance Plan
- Sulphur Dioxide Non-attainment
- Carbon Monoxide Attainment with a Maintenance Plan
- PM10 Attainment with a Maintenance Plan
- PM10 Non-attainment
- Ozone-8hr Non-attainment
- Sun Valley to Morgan Proposed Action Right-of-Way
- Alternative 2 South of SR 74
- Alternative 3 Carefree Highway
- Project Area - 2 Mile Buffer

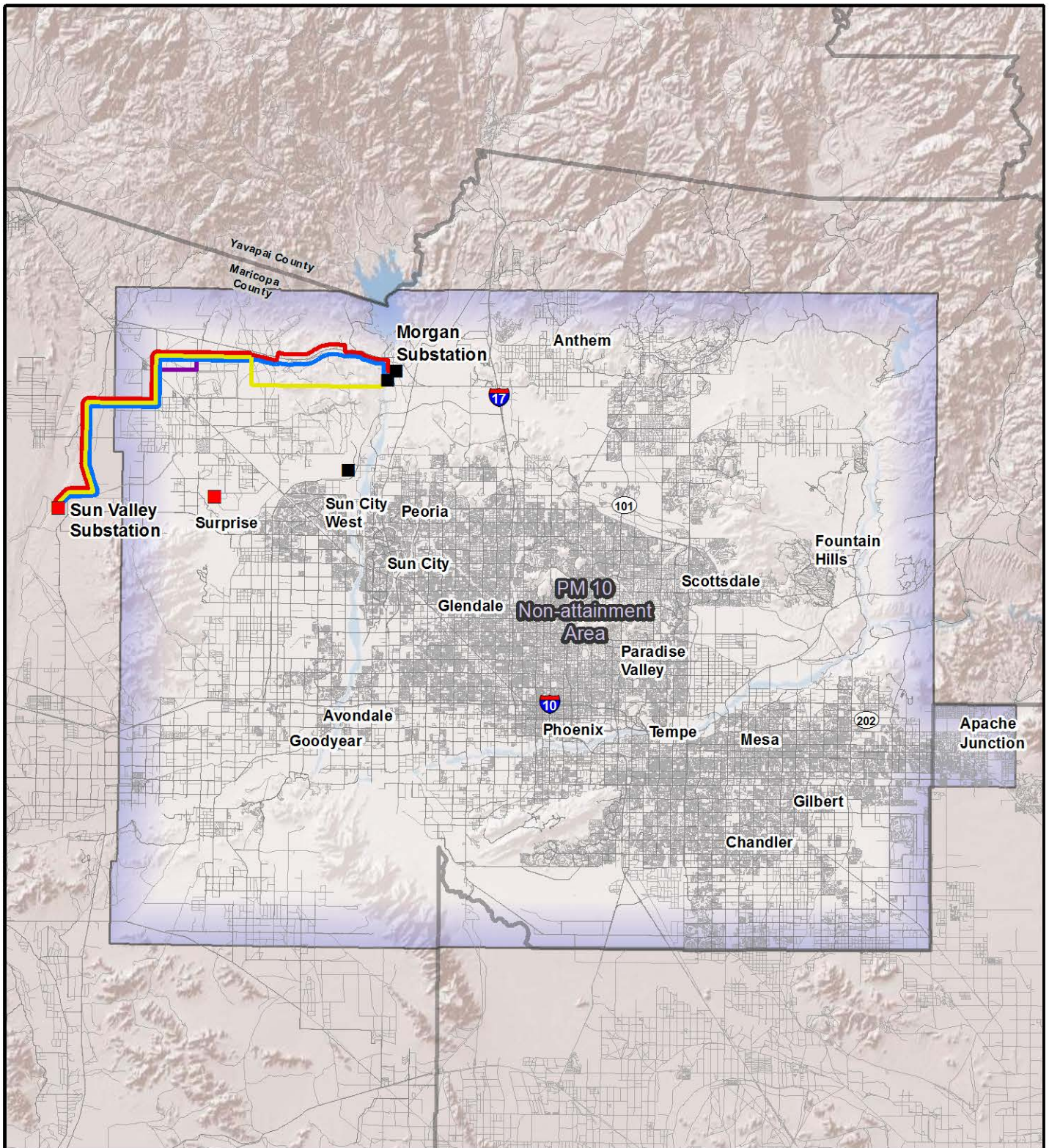
Base Map: ESRI Shaded Relief accessed at ArcGISOnline.com  
Attainment/Nonattainment areas: ADEQ



40 20 0 40  
Miles

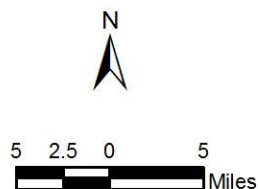
Figure 3.2-1  
Non-attainment and Attainment with  
Maintenance Plan Areas  
Sun Valley to Morgan 500/230kV -  
Transmission Line EIS Project





#### Legend

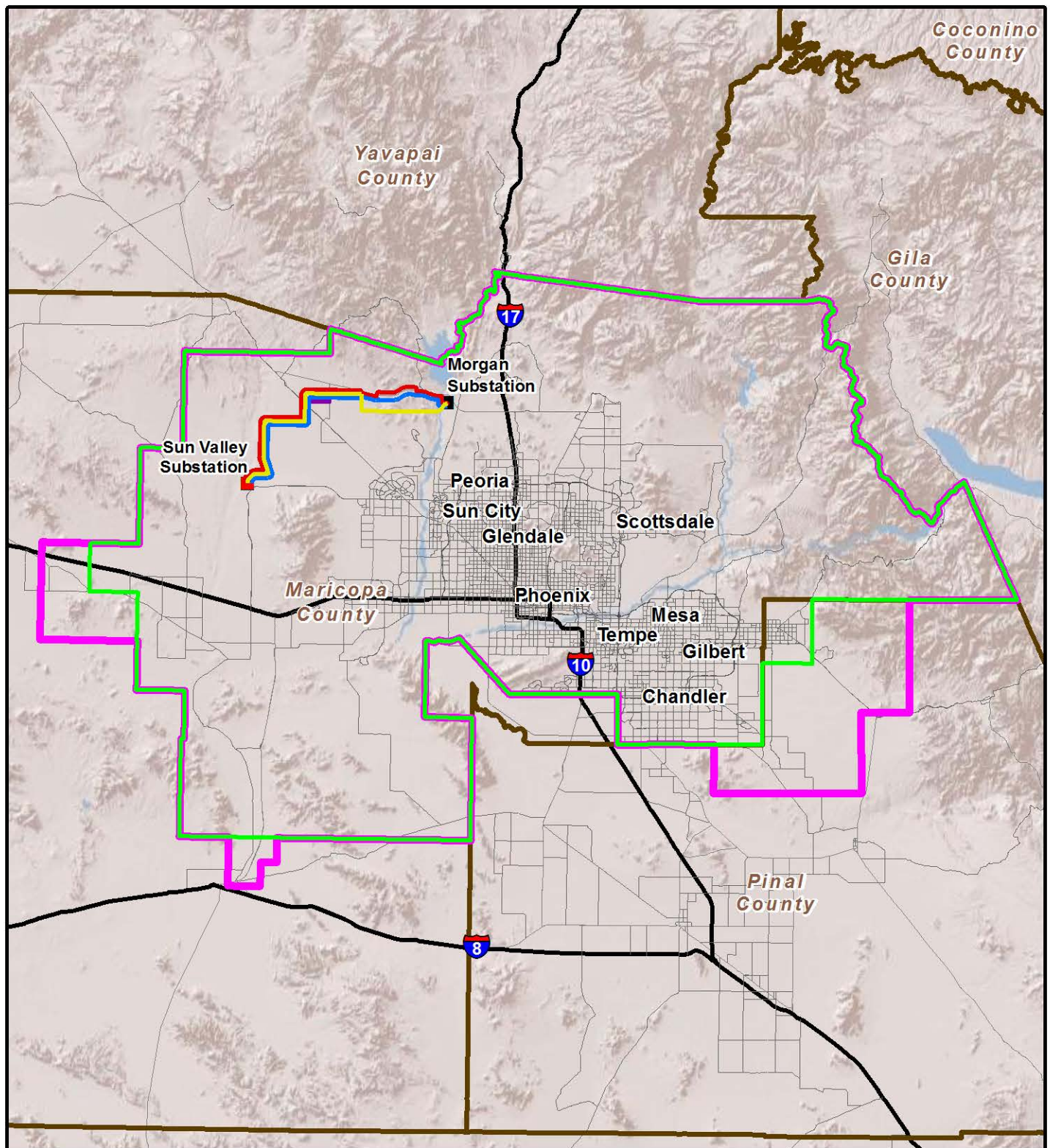
- Sun Valley to Morgan
- Proposed Action Right-of-Way
- Alternative 2 South of SR 74
- Alternative 3 Carefree Highway
- Sub-alternative: State Trust Land Route Variation
- Existing High-Voltage Substation
- Approved High-Voltage Substation
- PM 10 Non-attainment Area



Base Map: ESRI Shaded Relief accessed at ArcGISOnline.com

Figure 3.2-2  
PM 10 Non-attainment Area  
Sun Valley to Morgan 500/230kV -  
Transmission Line EIS Project





Base Map: ESRI Shaded Relief accessed at ArcGISOnline.com  
BLM 2011

### Legend

- Sun Valley to Morgan Proposed Action Right-of-Way
- Alternative 2 South of SR 74
- Alternative 3 Carefree Highway
- Sub-alternative: State Trust Land Route Variation
- Existing High-Voltage Substation
- Approved High-Voltage Substation
- Existing 8-Hour Ozone NAA
- Recommended 8-Hour Ozone NAA

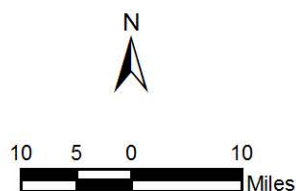
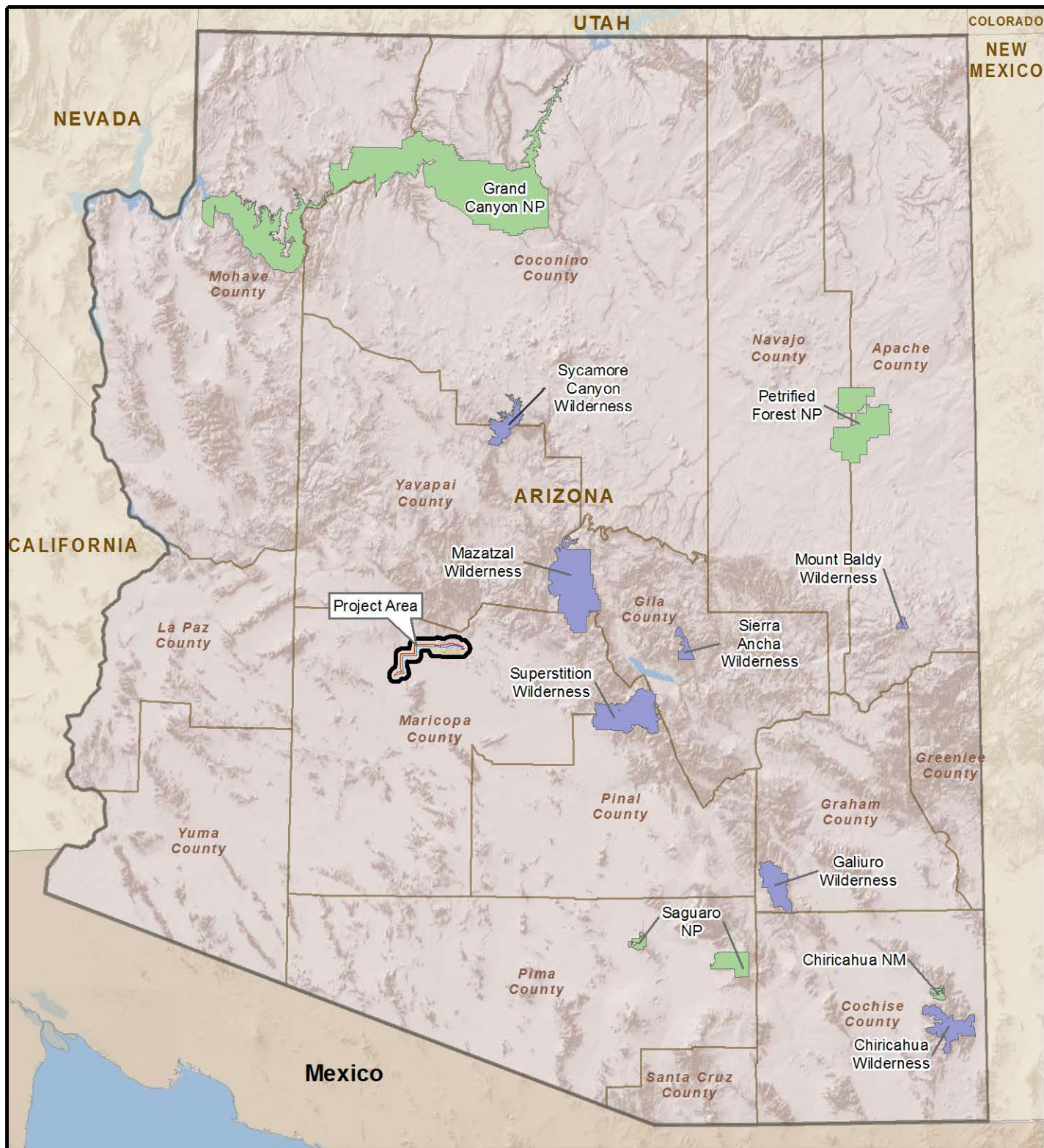


Figure 3.2-3  
Recommended 8-Hour Ozone  
Non-attainment Area  
Sun Valley to Morgan 500/230kV -  
Transmission Line EIS Project





### Legend

- Sun Valley to Morgan Proposed Action Right-of-Way
- Alternative 2 South of SR 74
- Alternative 3 Carefree Highway
- Project Area - 2 Mile Buffer

### Class One Airshed

- National Park Service Class I Boundaries
- US Forest Service Class I Boundaries

Base Map: ESRI Shaded Relief accessed at ArcGISOnline.com  
Class One Airsheds: FWS, NPS, USFS

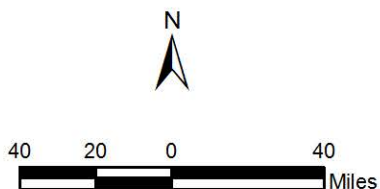
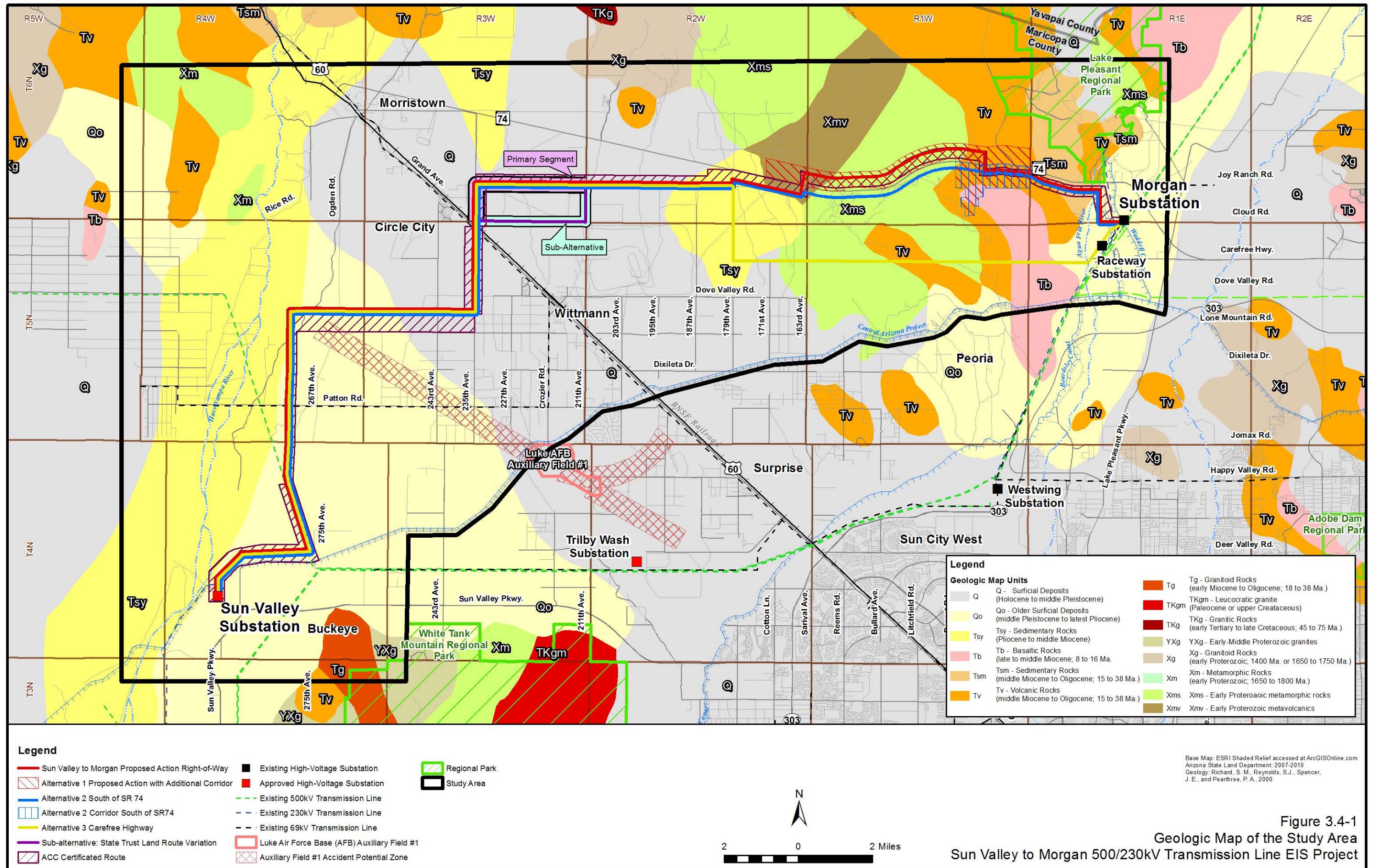
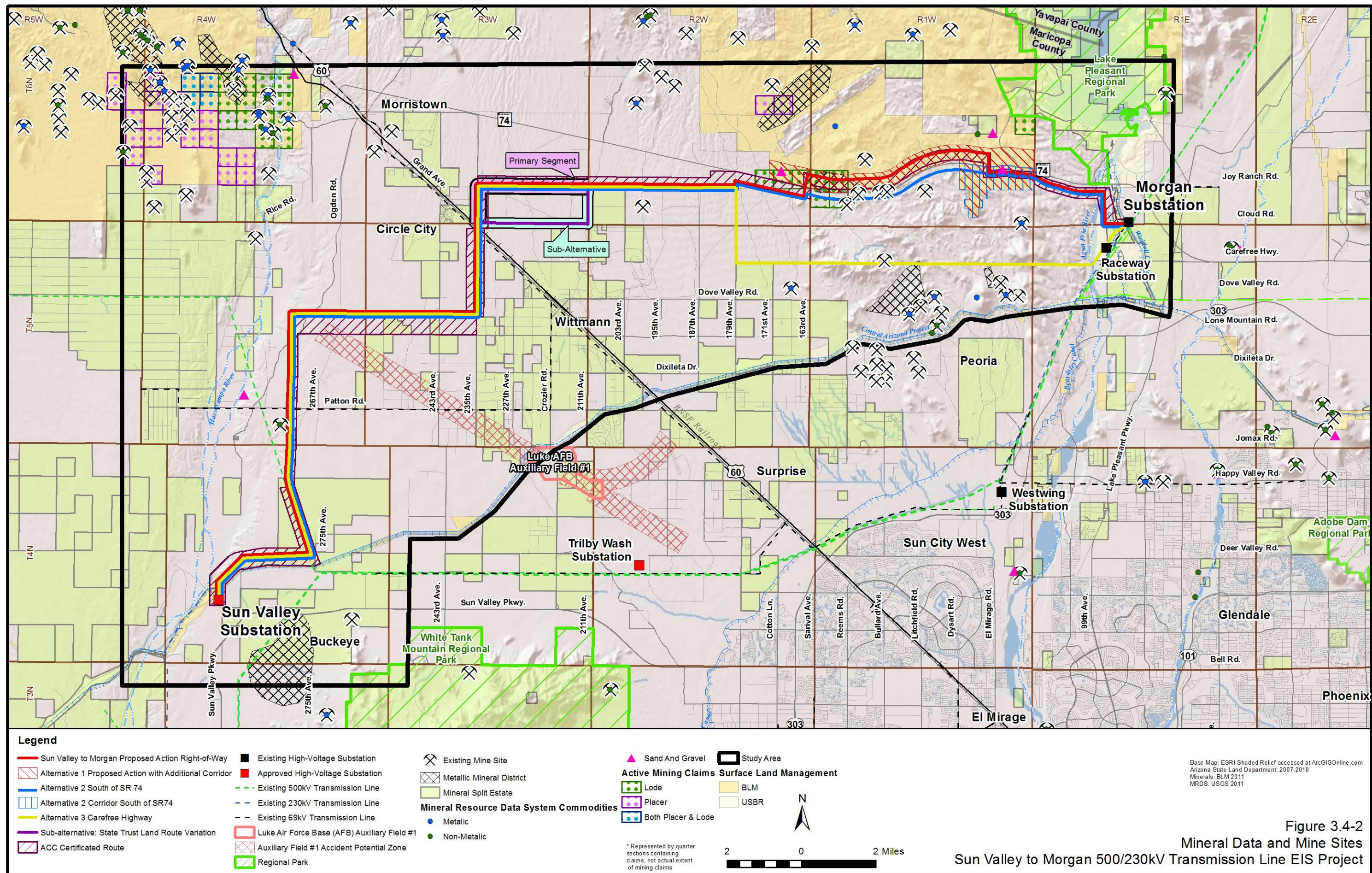


Figure 3.2-4  
Arizona Class I Areas  
Sun Valley to Morgan 500/230kV -  
Transmission Line EIS Project

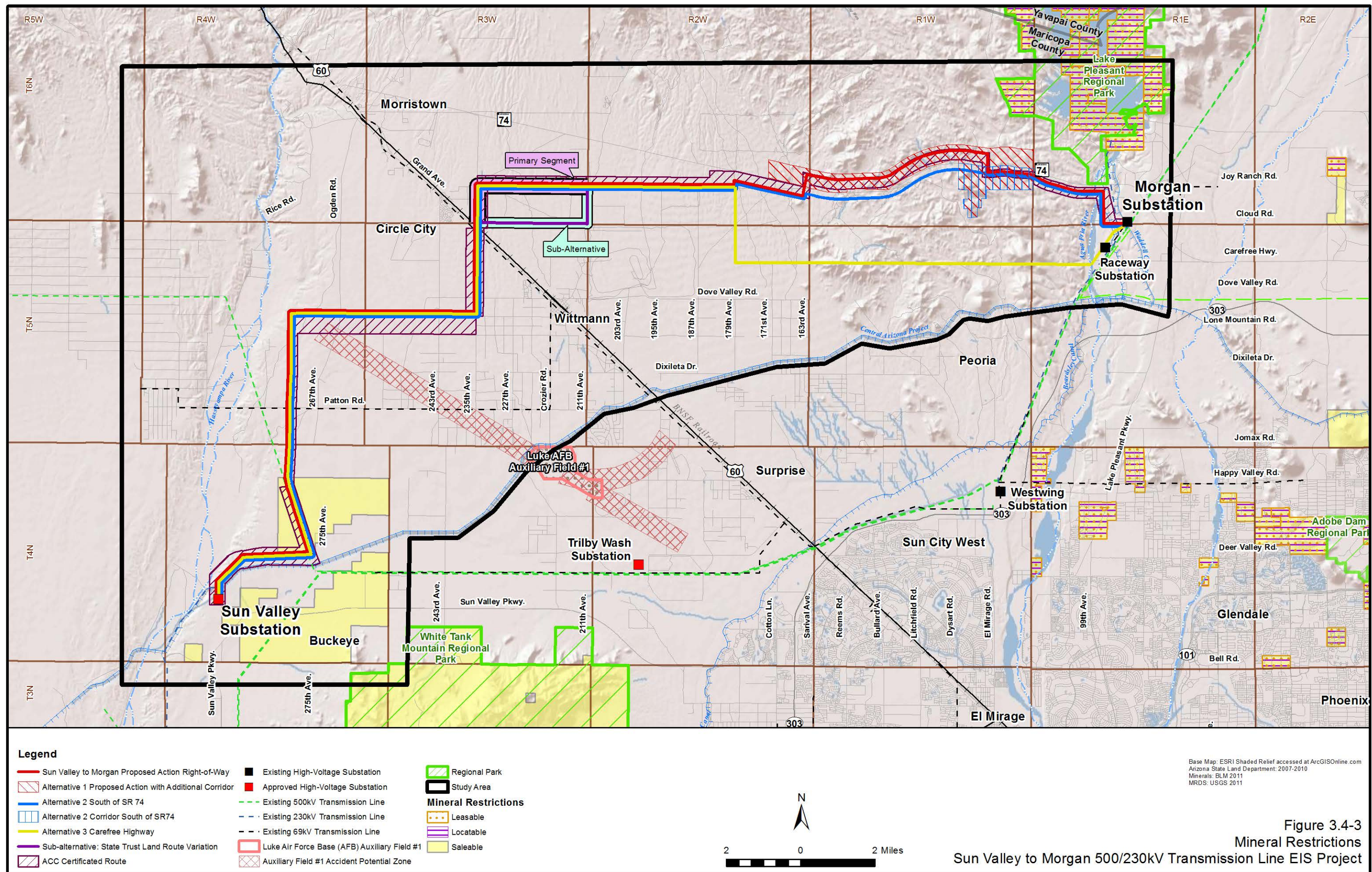




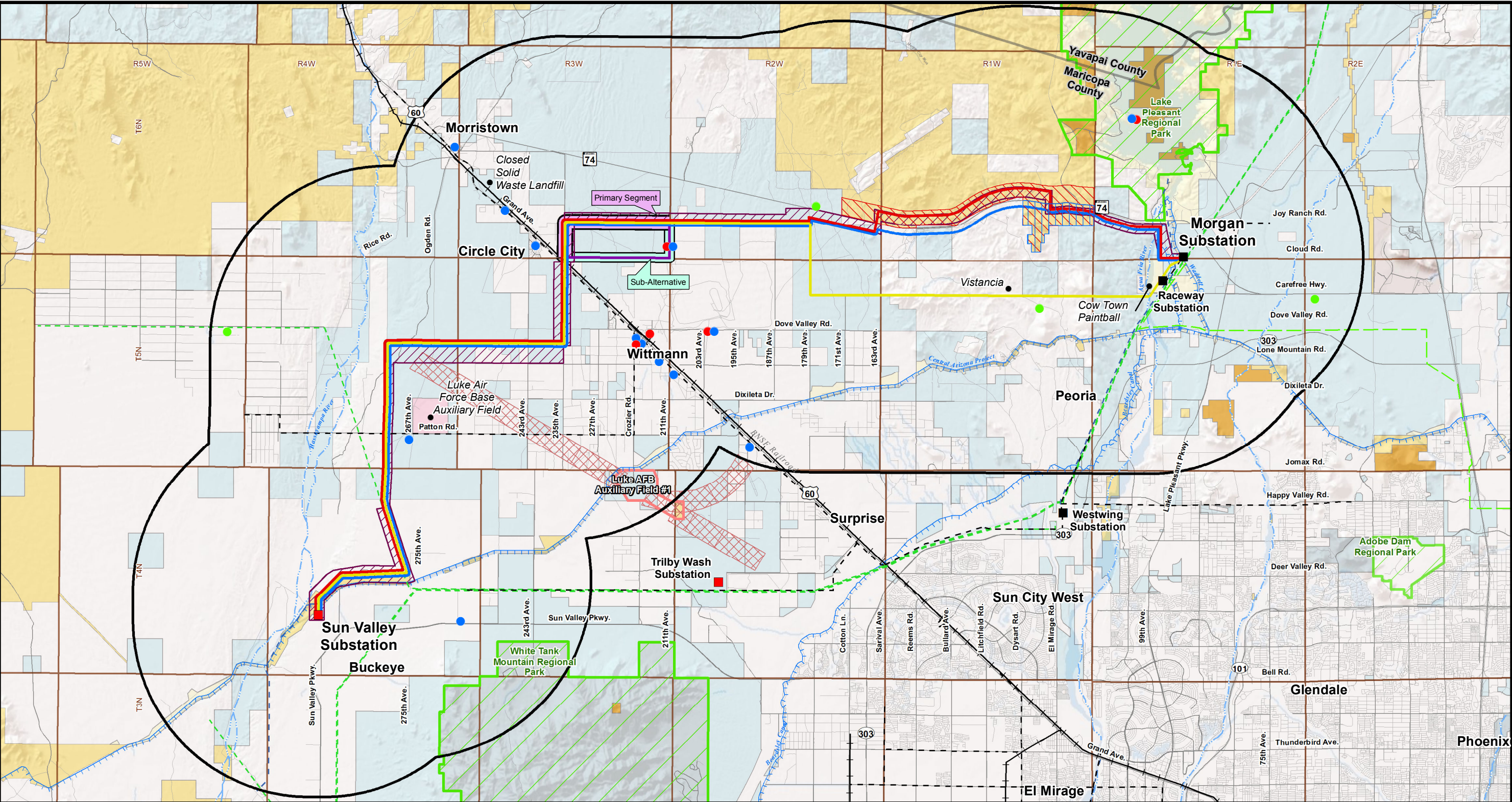












**Legend**

- |  |  |
|--|--|
| Sun Valley to Morgan Proposed Action Right-of-Way      | Existing High-Voltage Substation             |
| Alternative 1 Proposed Action with Additional Corridor | Approved High-Voltage Substation             |
| Alternative 2 South of SR 74                           | Existing 500kV Transmission Line             |
| Alternative 2 Corridor South of SR74                   | Existing 230kV Transmission Line             |
| Alternative 3 Carefree Highway                         | Existing 69kV Transmission Line              |
| Sub-alternative: State Trust Land Route Variation      | Luke Air Force Base (AFB) Auxiliary Field #1 |
| ACC Certificated Route                                 | Auxiliary Field #1 Accident Potential Zone   |

**Surface Land Management**

- |                      |                                |
|----------------------|--------------------------------|
| BLM                  | Regional Park                  |
| USBR                 | Study Area                     |
| County               | <b>Hazardous Sites</b>         |
| Military             | Leaking UST (LUST)             |
| Local or State Parks | Spill and Remediation Area     |
| State Trust Lands    | Underground Storage Tank (UST) |
| Private              | Disposal Site                  |

**Regional Park**

**Study Area**

**Hazardous Sites**

- |                                |
|--------------------------------|
| Leaking UST (LUST)             |
| Spill and Remediation Area     |
| Underground Storage Tank (UST) |
| Disposal Site                  |

Base Map: ESRI Shaded Relief accessed at ArcGISOnline.com  
Arizona State Land Department: 2007-2010  
Hazard Sites: URS 2011

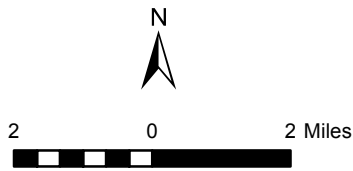
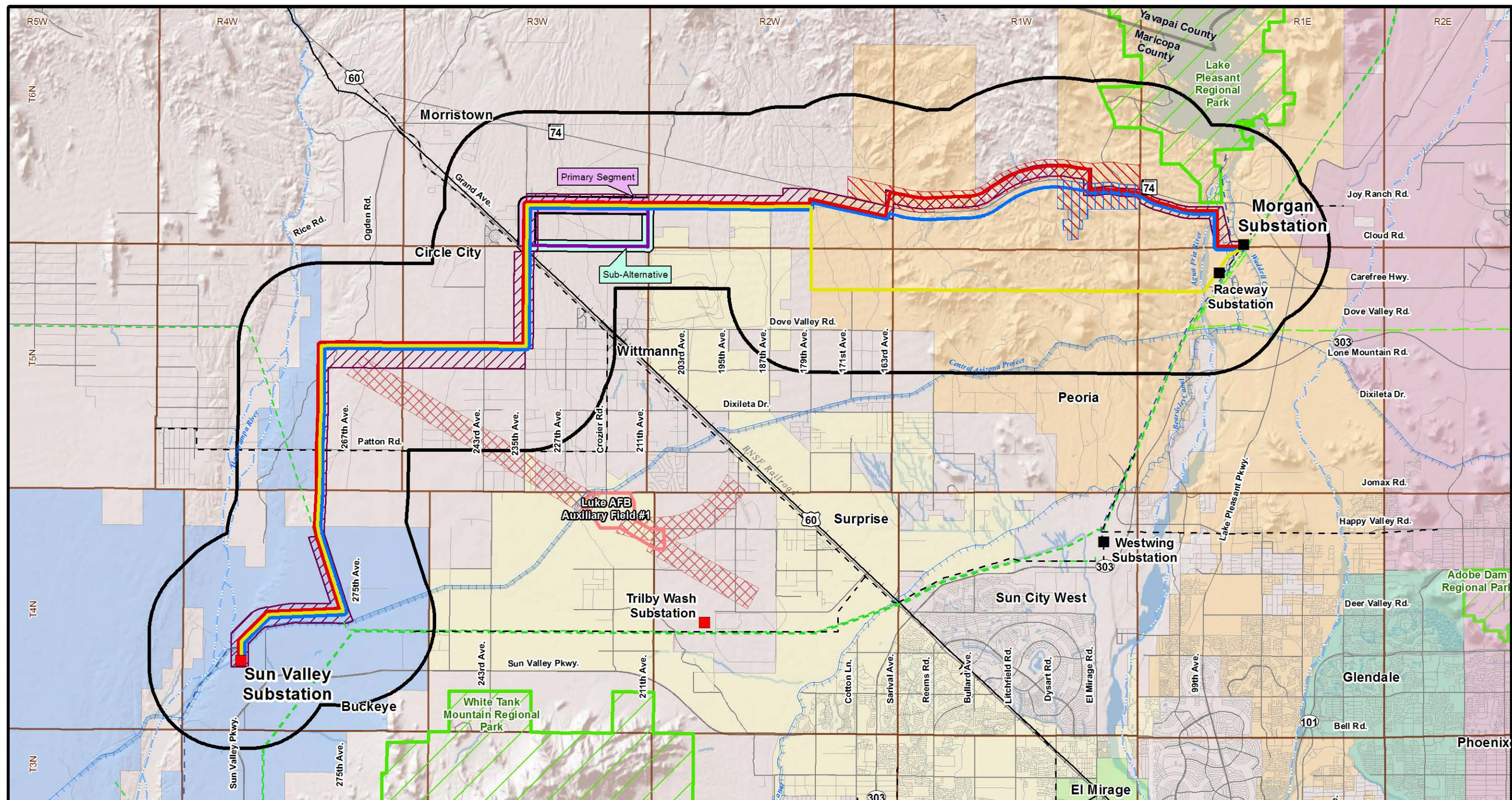
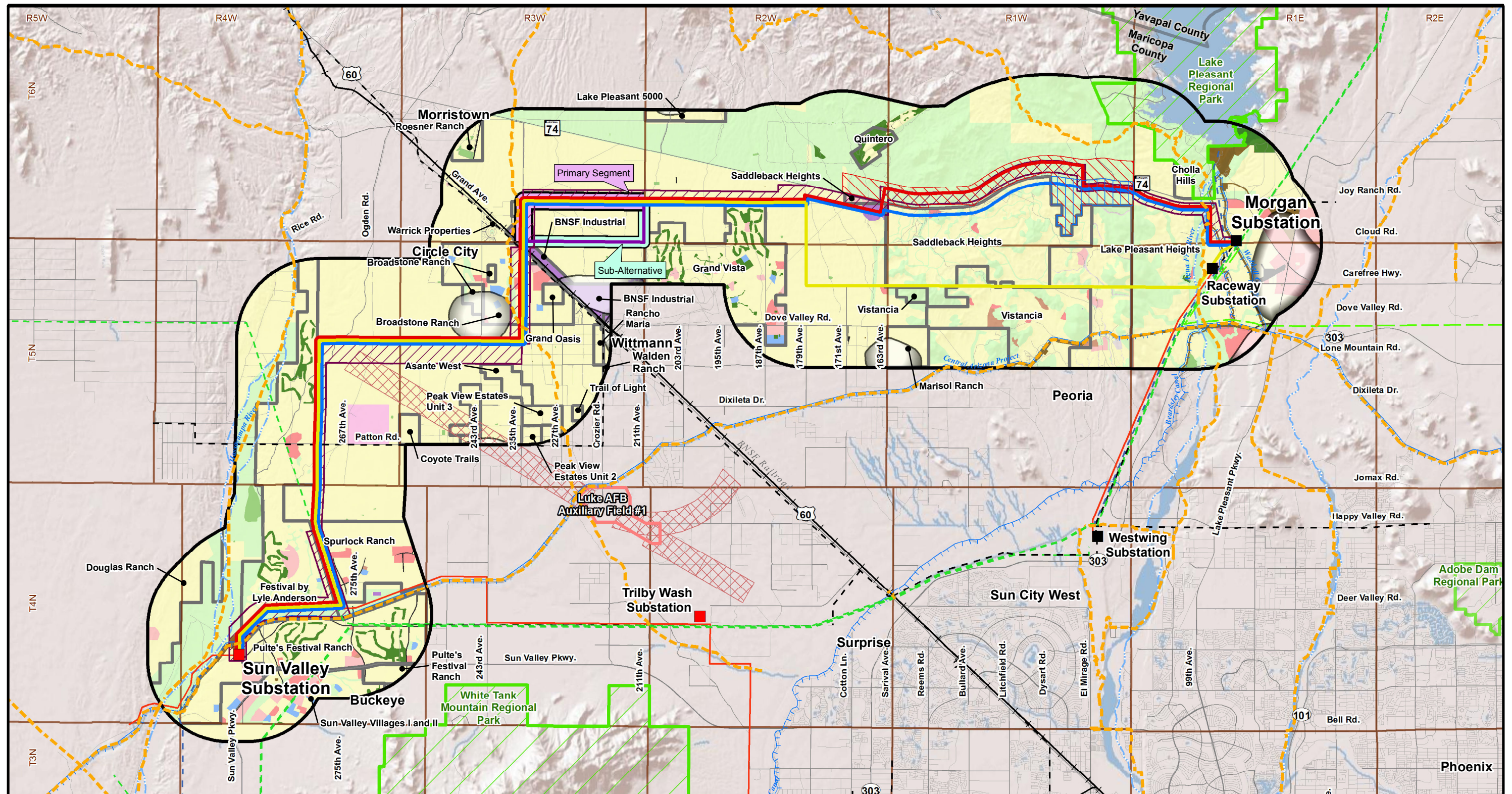


Figure 3.5-1  
Hazardous Material Sites  
Sun Valley to Morgan 500/230kV Transmission Line EIS Project



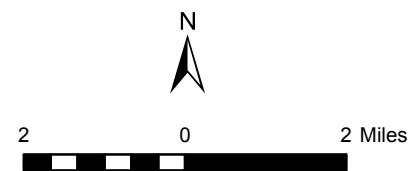






**Legend**

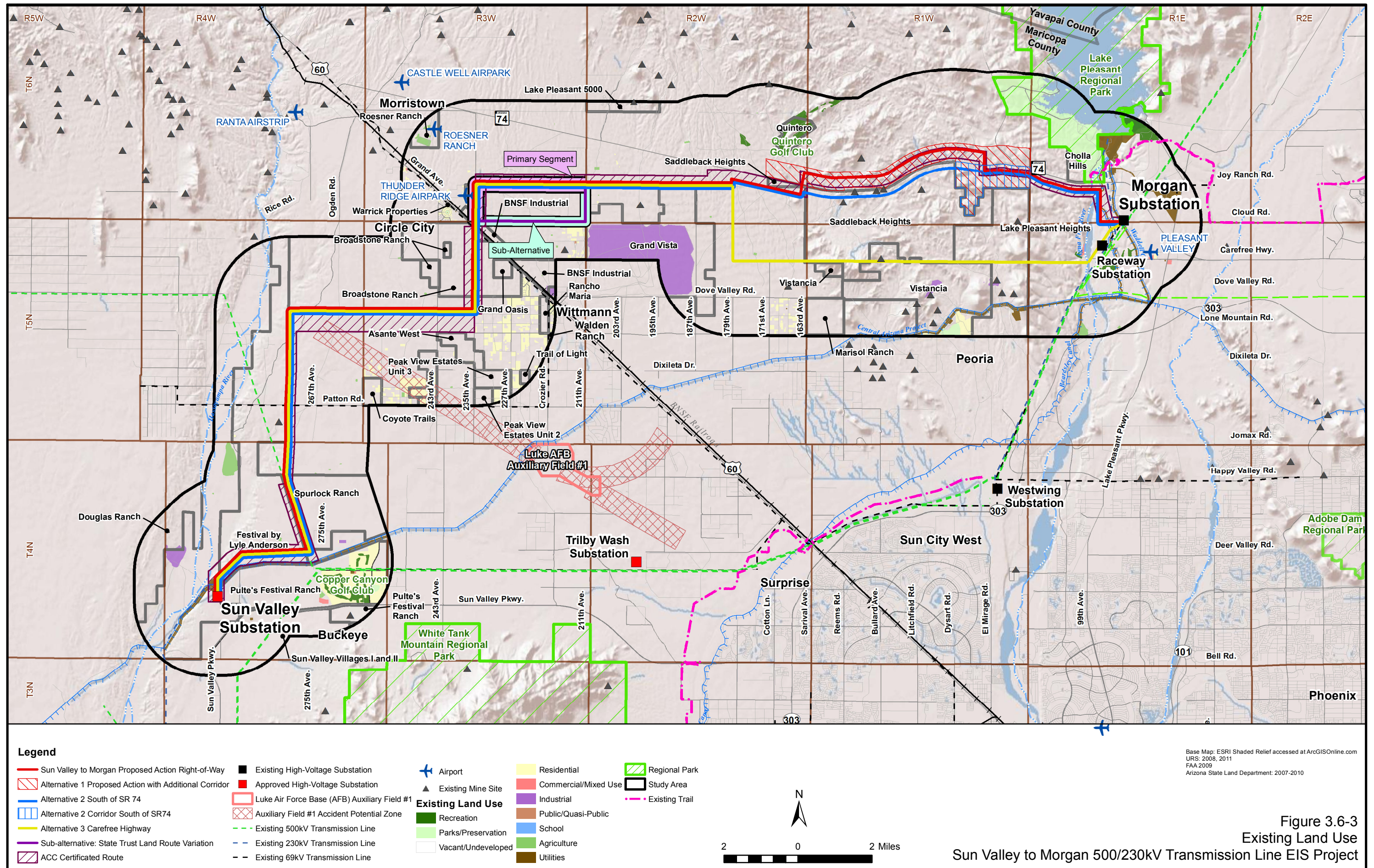
- |  |  |   |  |
|--|--|---|--|
| <ul style="list-style-type: none"> <li>Sun Valley to Morgan Proposed Action Right-of-Way</li> <li>Alternative 1 Proposed Action with Additional Corridor</li> <li>Alternative 2 South of SR 74</li> <li>Alternative 2 Corridor South of SR74</li> <li>Alternative 3 Carefree Highway</li> <li>Sub-alternative: State Trust Land Route Variation</li> <li>ACC Certificated Route</li> </ul> | <ul style="list-style-type: none"> <li>Existing High-Voltage Substation</li> <li>Approved High-Voltage Substation</li> <li>Existing 500kV Transmission Line</li> <li>Existing 230kV Transmission Line</li> <li>Existing 69kV Transmission Line</li> <li>Approved High-Voltage Transmission Line</li> <li>Luke Air Force Base (AFB) Auxiliary Field #1</li> <li>Auxiliary Field #1 Accident Potential Zone</li> </ul> | <p><b>Future Land Use</b></p> <ul style="list-style-type: none"> <li>Utilities</li> <li>Open Space</li> <li>Recreation</li> <li>Agricultural</li> <li>Residential</li> <li>Commercial</li> <li>Mixed Use</li> <li>Industrial</li> <li>Public/Quasi</li> <li>School</li> <li>Transportation</li> <li>Military</li> </ul> | <ul style="list-style-type: none"> <li>Identified Growth Area</li> <li>Regional Park</li> <li>Study Area</li> <li>Future Trail</li> <li>Existing and Future Development Areas</li> </ul> |
|--|--|---|--|



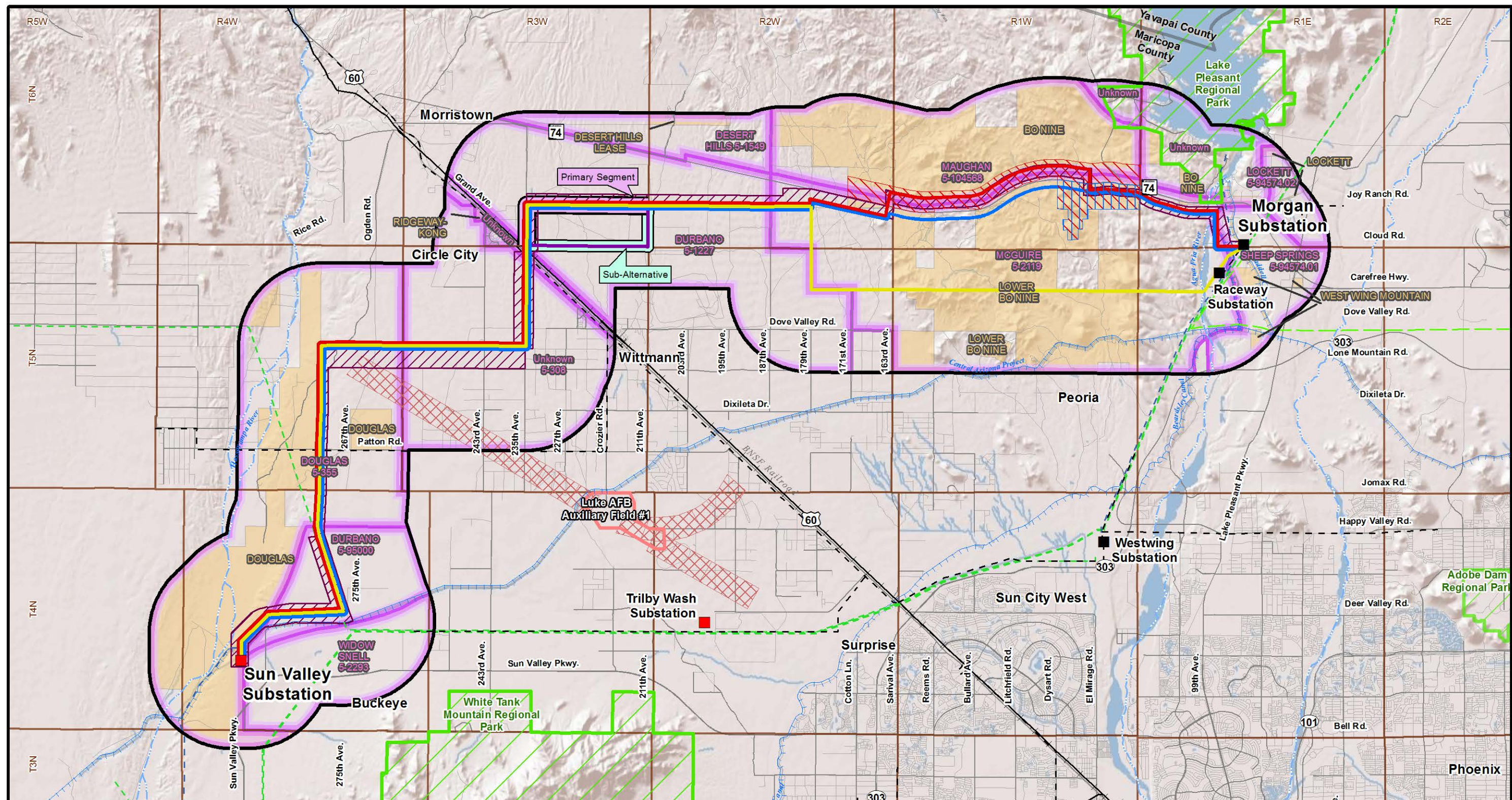
Base Map: ESRI Shaded Relief accessed at ArcGISOnline.com  
 URS: 2008, 2011  
 FAA: 2009  
 Maricopa Association of Governments: 2011  
 JBR: 2011  
 Arizona State Land Department: 2007-2010

**Figure 3.6-2**  
**Future Planned Land Use**  
 Sun Valley to Morgan 500/230kV Transmission Line EIS Project

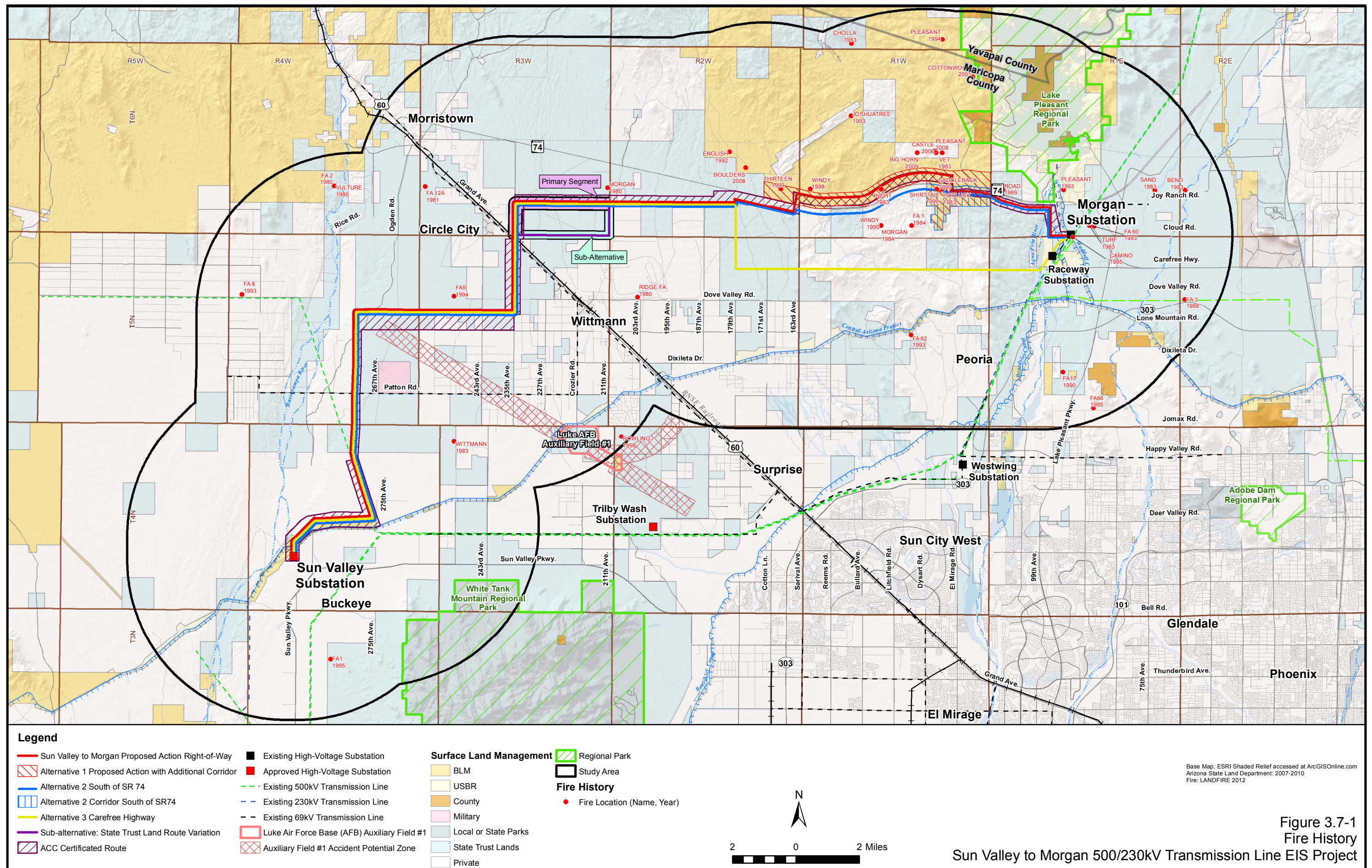




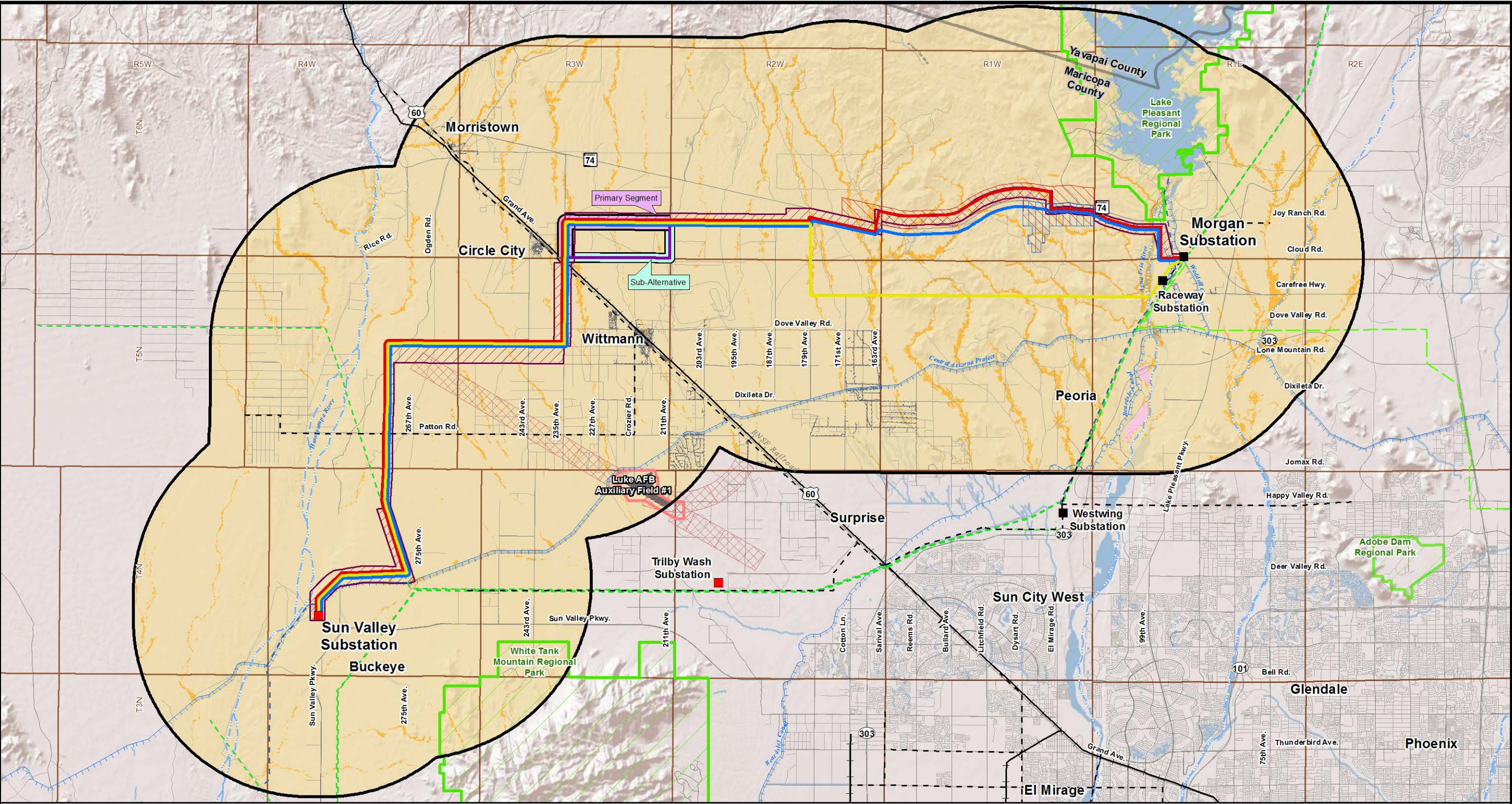








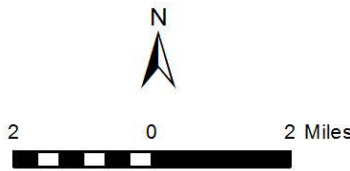




**Legend**

- |  |  |
|--|--|
| Sun Valley to Morgan Proposed Action Right-of-Way      | Existing High-Voltage Substation             |
| Alternative 1 Proposed Action with Additional Corridor | Approved High-Voltage Substation             |
| Alternative 2 South of SR 74                           | Existing 500kV Transmission Line             |
| Alternative 2 Corridor South of SR74                   | Existing 230kV Transmission Line             |
| Alternative 3 Carefree Highway                         | Existing 69kV Transmission Line              |
| Sub-alternative: State Trust Land Route Variation      | Luke Air Force Base (AFB) Auxiliary Field #1 |
| ACC Certificated Route                                 | Auxiliary Field #1 Accident Potential Zone   |

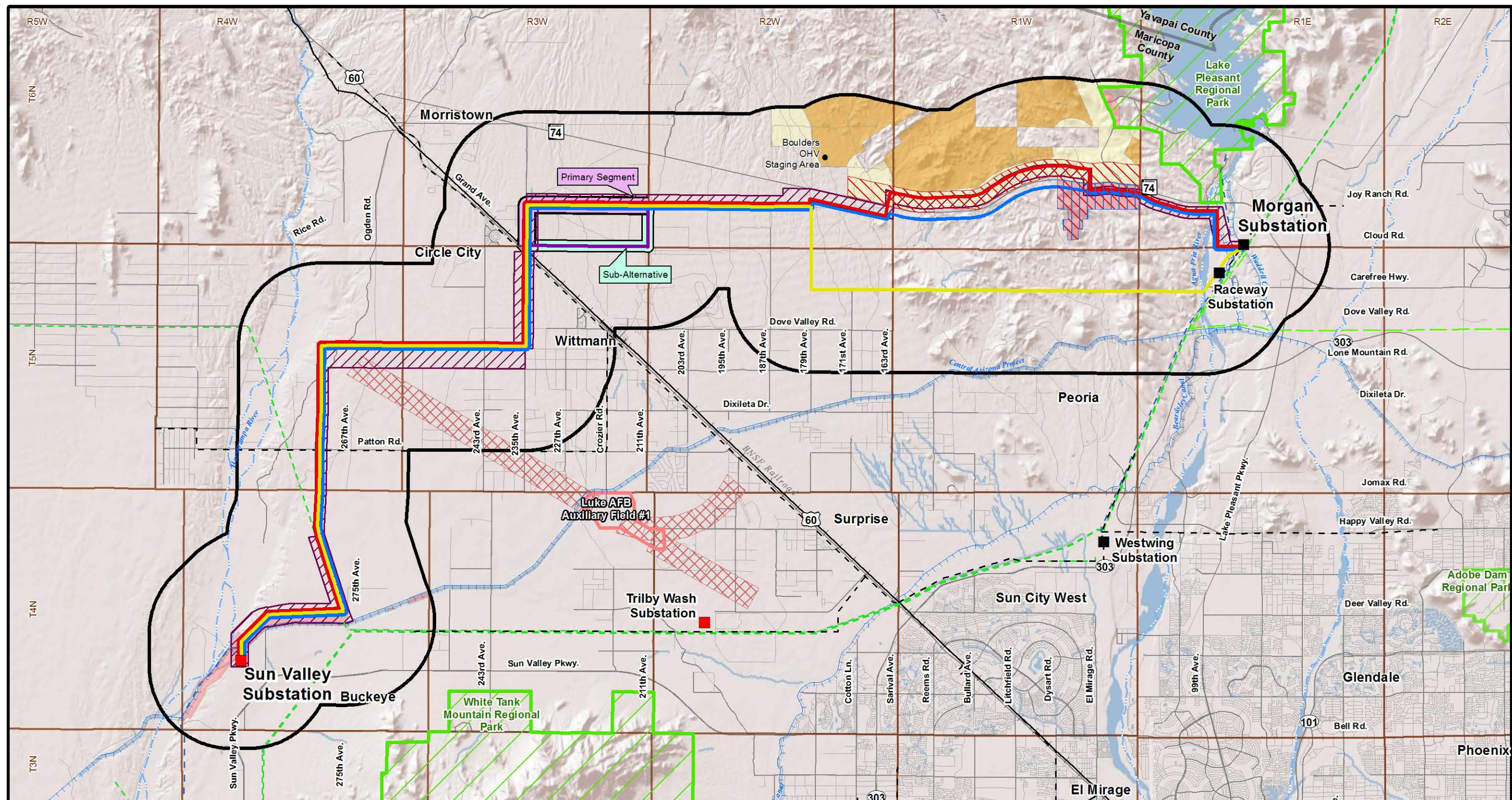
- |                                     |             |
|-------------------------------------|-------------|
| Regional Park                       |             |
| Study Area                          |             |
| <b>Vegetation Condition Classes</b> |             |
| Vegetation Class I                  | Urban       |
| Vegetation Class II                 | Agriculture |



Base Map: ESRI Shaded Relief accessed at ArcGISOnline.com  
Arizona State Land Department: 2007-2010  
Fire: LANDFIRE 2012

**Figure 3.7-2**  
**Vegetation Condition Classes**  
**Sun Valley to Morgan 500/230kV Transmission Line EIS Project**





**Legend**

- Sun Valley to Morgan Proposed Action Right-of-Way
- Alternative 1 Proposed Action with Additional Corridor
- Alternative 2 South of SR 74
- Alternative 2 Corridor South of SR74
- Alternative 3 Carefree Highway
- Sub-alternative: State Trust Land Route Variation
- ACC Certified Route
- Existing High-Voltage Substation
- Approved High-Voltage Substation
- Existing 500kV Transmission Line
- Existing 230kV Transmission Line
- Existing 69kV Transmission Line
- Luke Air Force Base (AFB) Auxiliary Field #1
- Auxiliary Field #1 Accident Potential Zone
- Regional Park
- Study Area

**Recreation Opportunity Spectrum Classes**

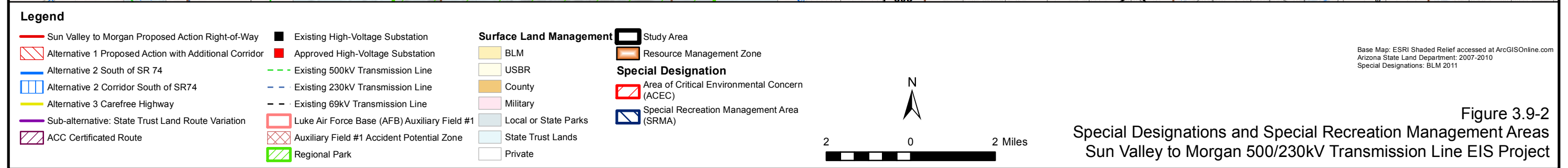
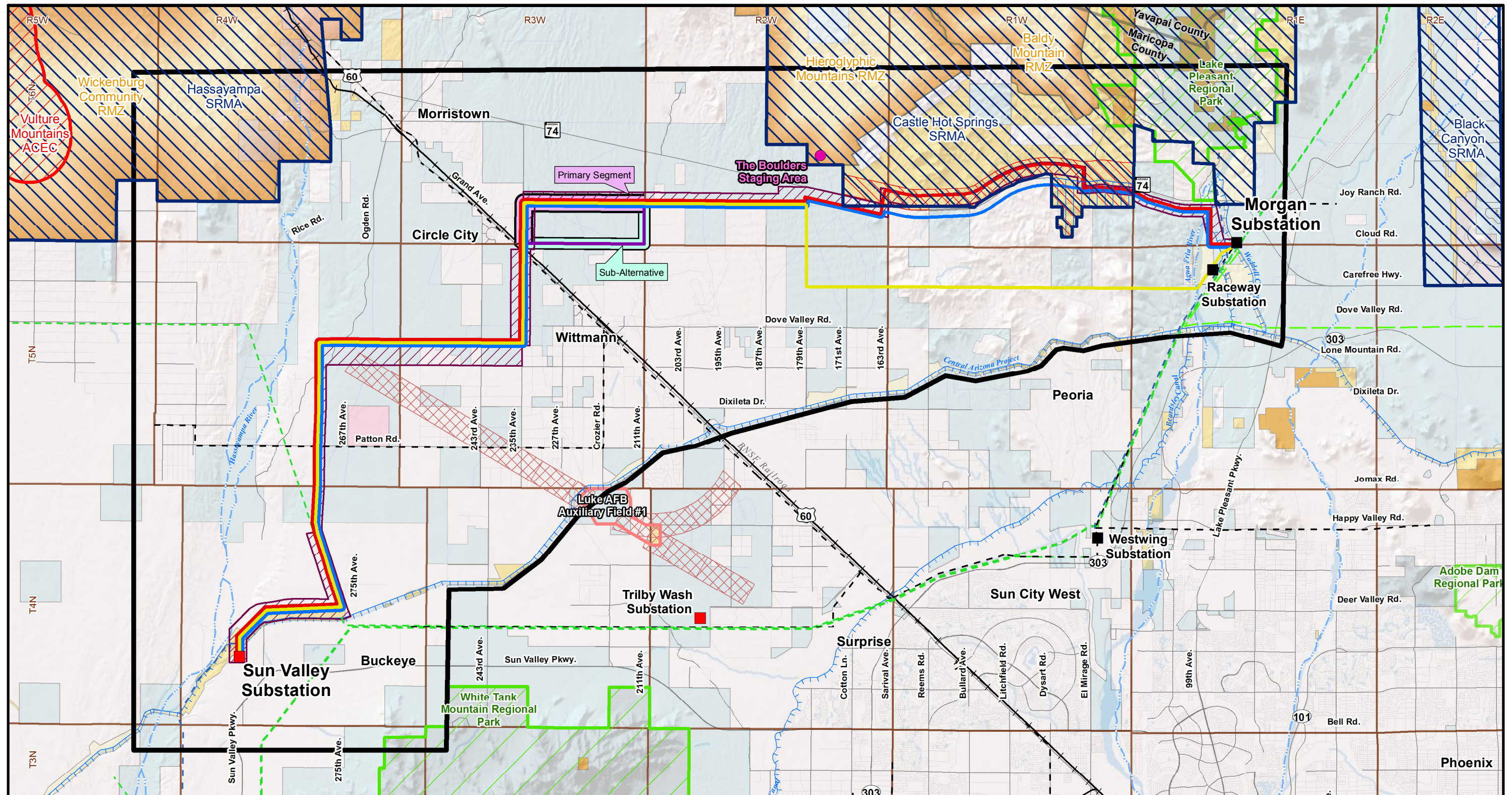
- Roaded Natural
- Rural
- Semi-Primitive Motorized

Base Map: ESRI Shaded Relief accessed at ArcGISOnline.com  
ROS: BLM

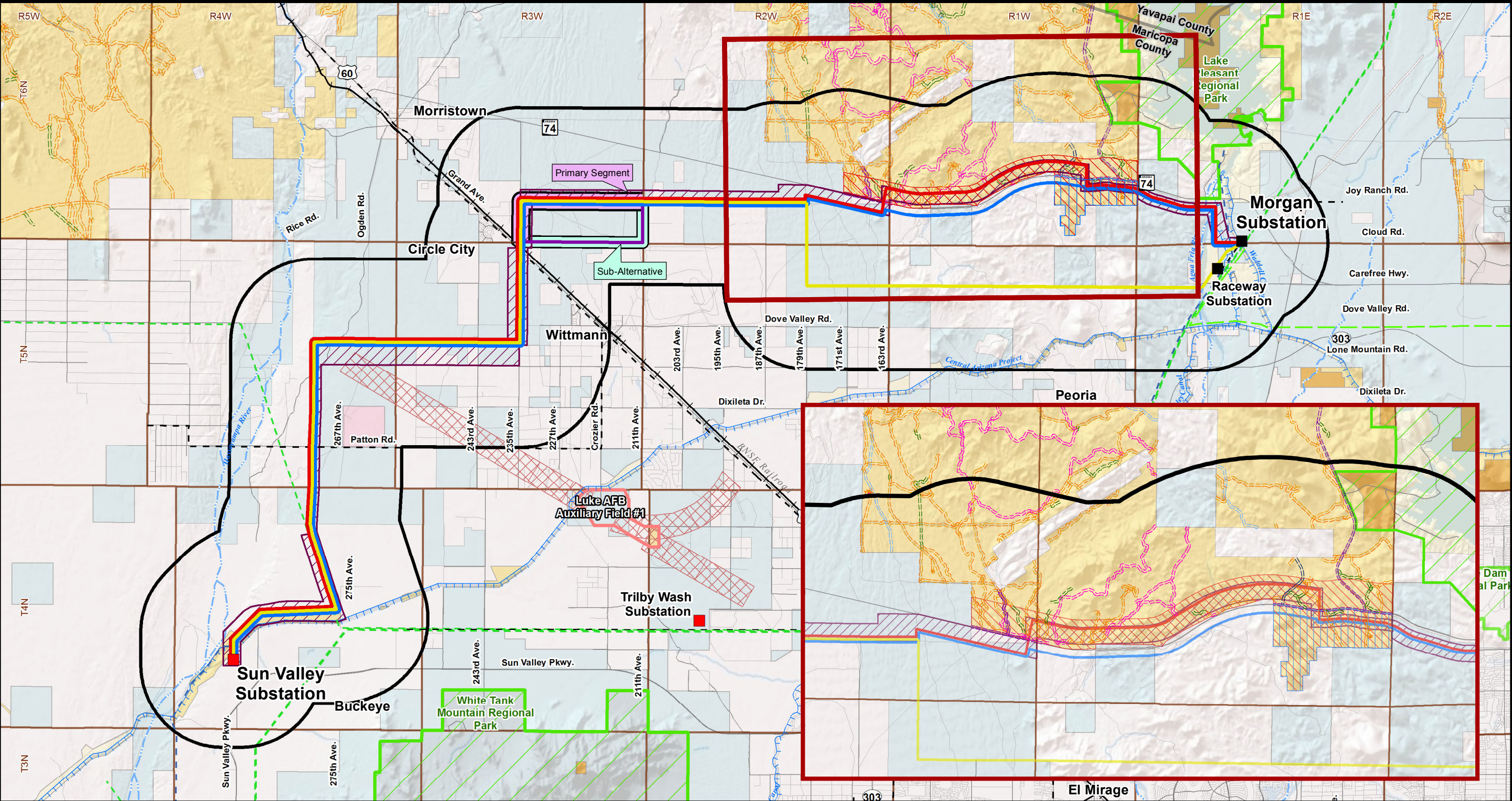
2 0 2 Miles

**Figure 3.9-1**  
Recreation Opportunity Spectrum  
Sun Valley to Morgan 500/230kV Transmission Line EIS Project









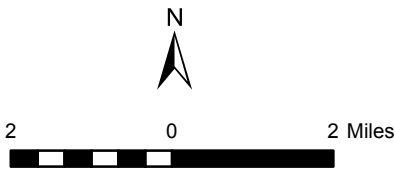
**Legend**

- |  |  |
|--|--|
| Sun Valley to Morgan Proposed Action Right-of-Way      | Existing High-Voltage Substation             |
| Alternative 1 Proposed Action with Additional Corridor | Approved High-Voltage Substation             |
| Alternative 2 South of SR 74                           | Existing 500kV Transmission Line             |
| Alternative 2 Corridor South of SR74                   | Existing 230kV Transmission Line             |
| Alternative 3 Carefree Highway                         | Existing 69kV Transmission Line              |
| Sub-alternative: State Trust Land Route Variation      | Luke Air Force Base (AFB) Auxiliary Field #1 |
| ACC Certificated Route                                 | Auxiliary Field #1 Accident Potential Zone   |
|  | Regional Park                                |

**Surface Land Management BLM Routes**

- |                      |                        |
|----------------------|------------------------|
| BLM                  | Primary Road Paved     |
| USBR                 | Secondary Road Paved   |
| County               | Secondary Road Unpaved |
| Military             | Tertiary Road Unpaved  |
| Local or State Parks | Single Track           |
| State Trust Lands    | Reclaiming             |
| Private              |                        |

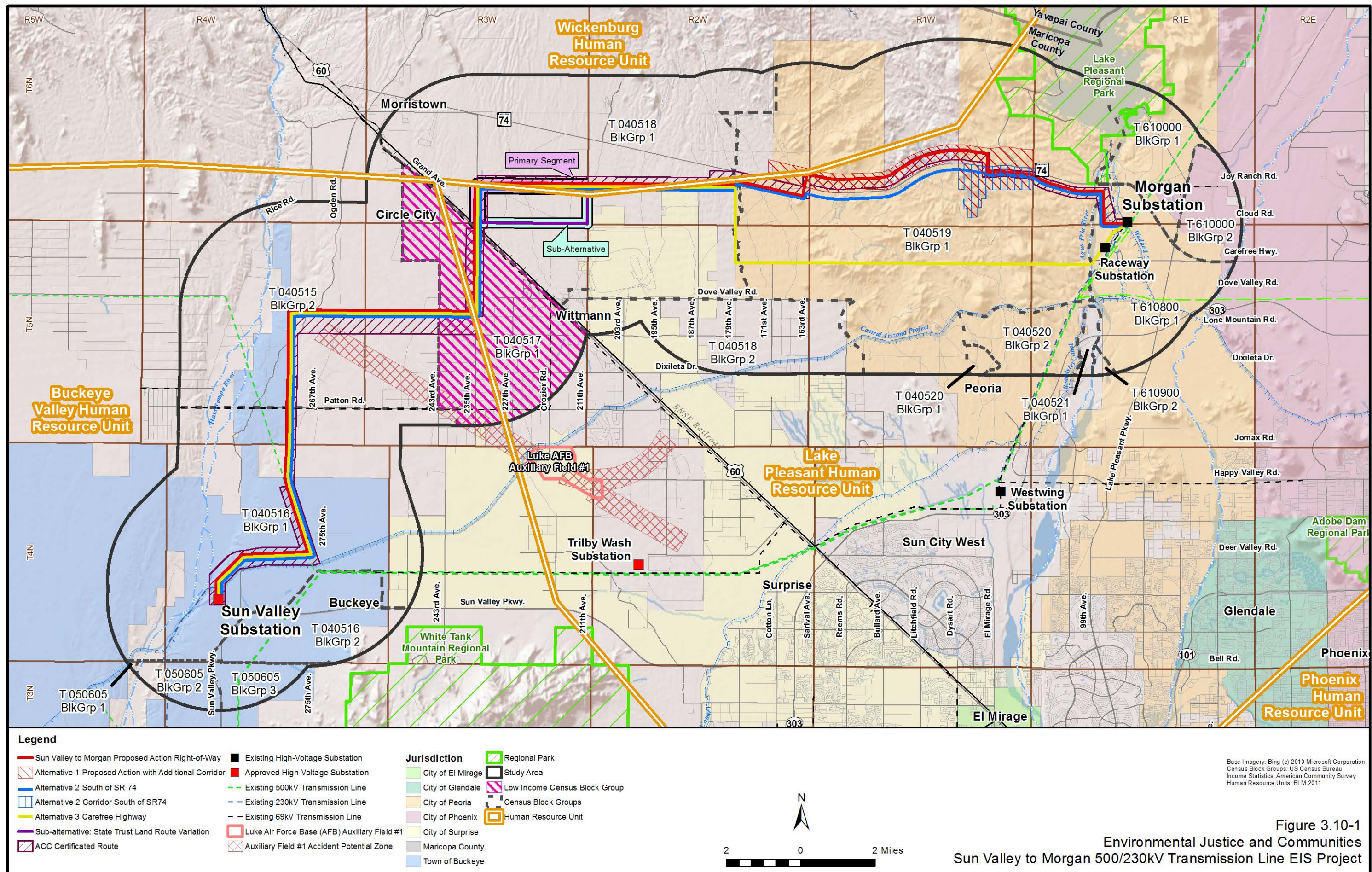
Study Area



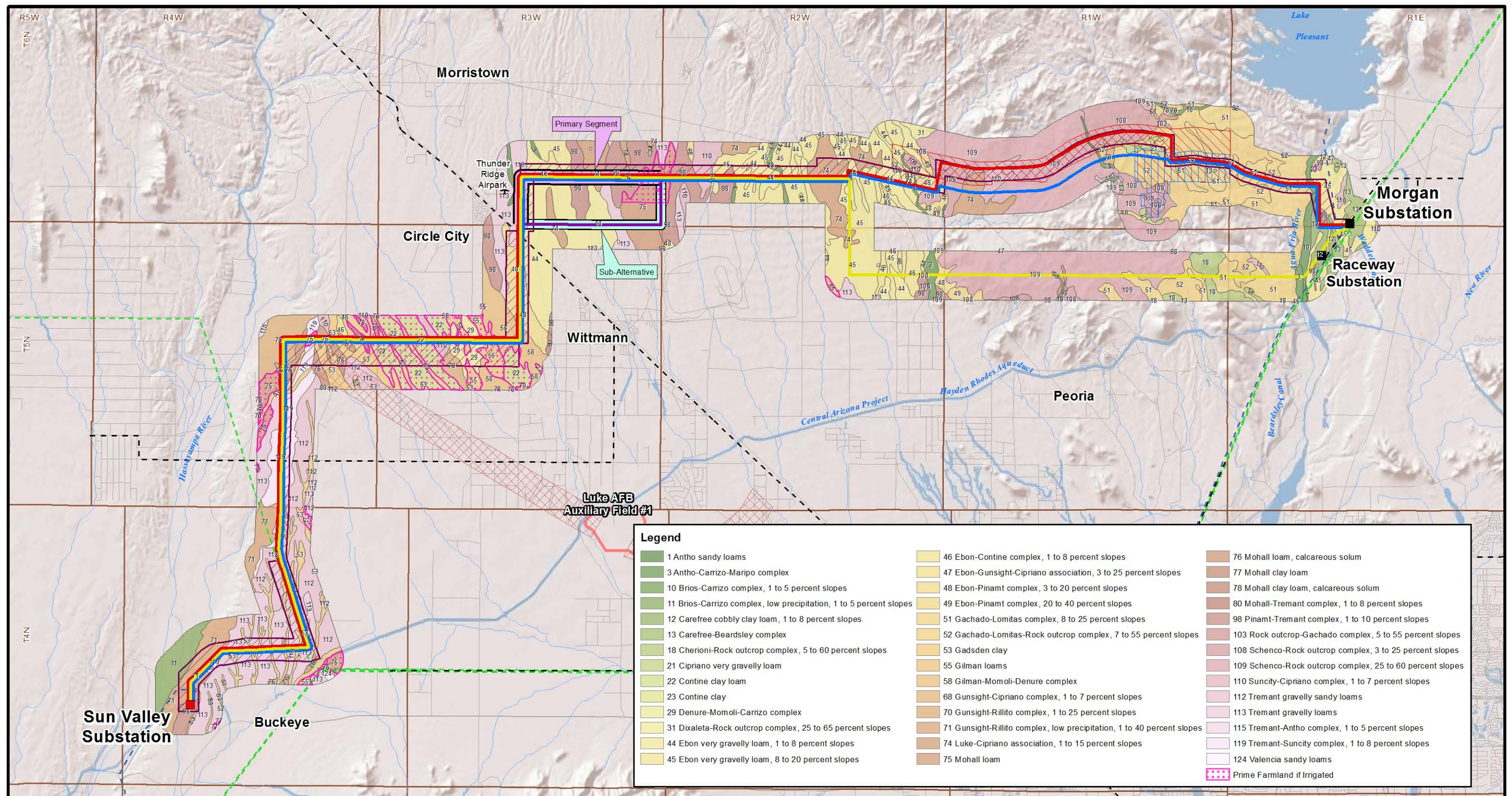
Base Map: ESRI Shaded Relief accessed at ArcGISOnline.com  
Arizona State Land Department: 2007-2010

**Figure 3.9-3**  
**Route Designations**  
**Sun Valley to Morgan 500/230kV Transmission Line EIS Project**









Base Map: ESRI Shaded Relief accessed at ArcGISOnline.com  
 Arizona State Land Department: 2007-2010  
 SSURGO Soils: USDA 2011

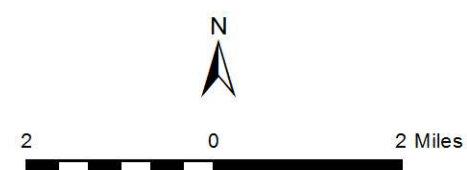


Figure 3.11-1  
 Soil Units  
 Sun Valley to Morgan 500/230kV Transmission Line EIS Project



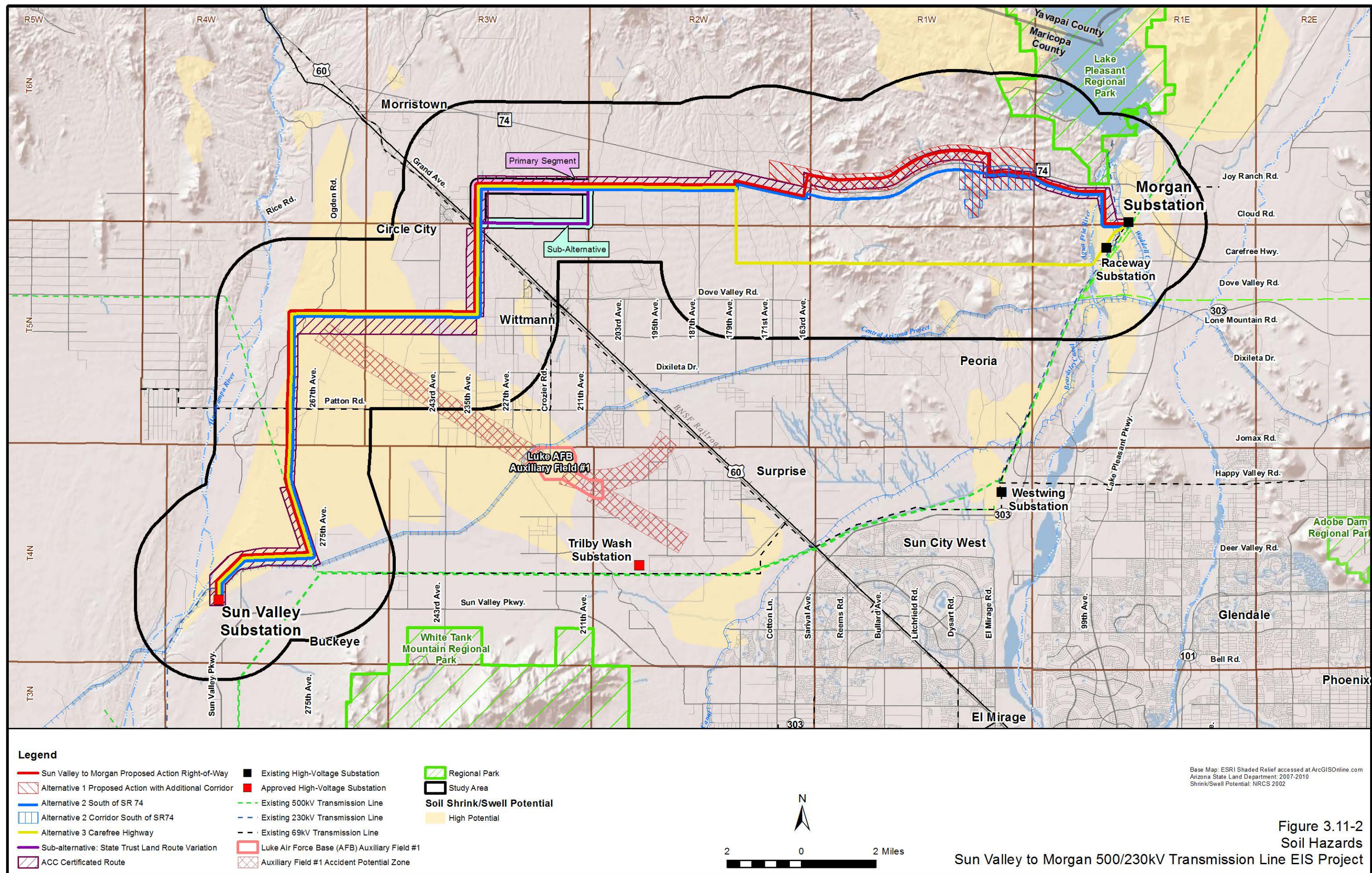
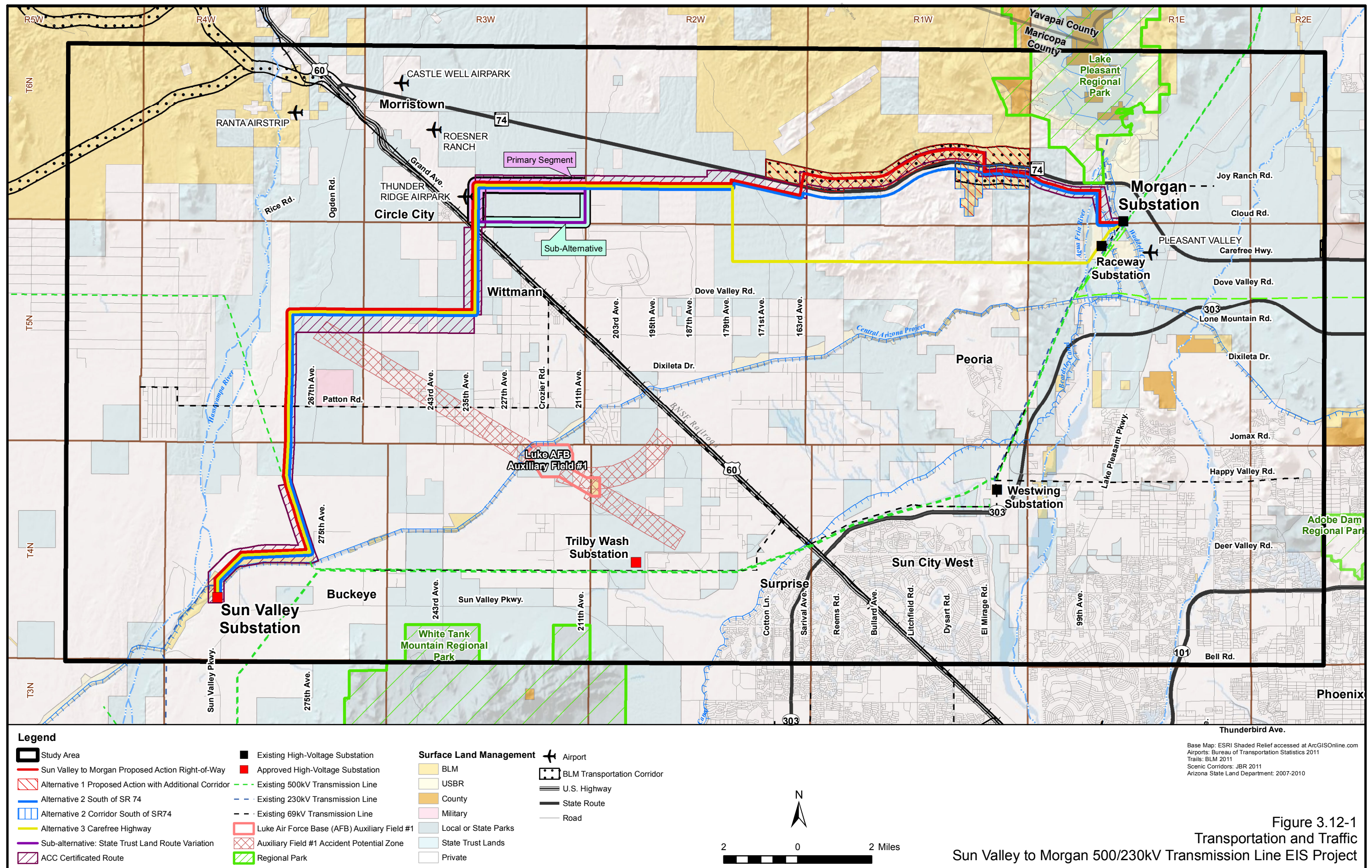
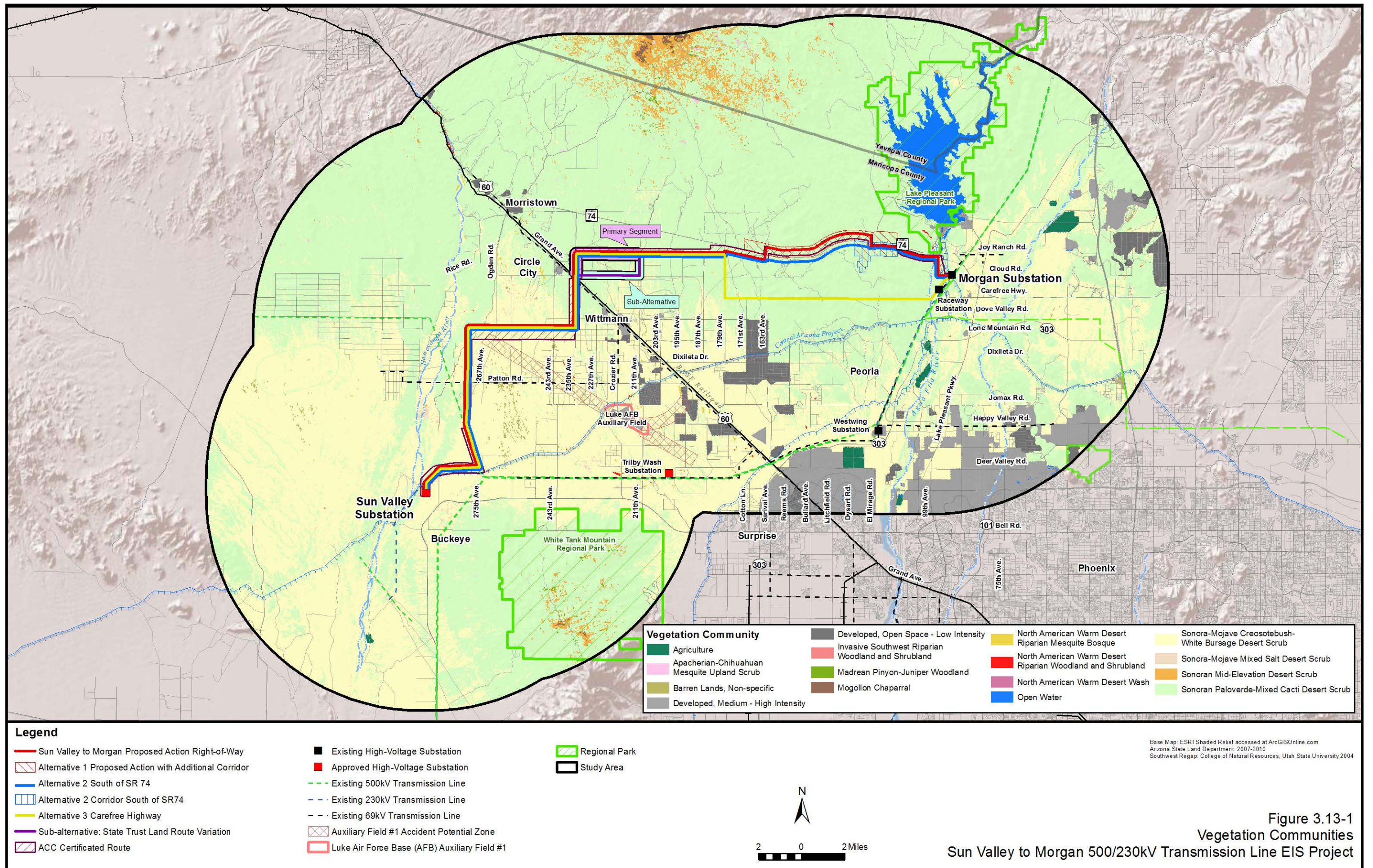


Figure 3.11-2  
Soil Hazards  
Sun Valley to Morgan 500/230kV Transmission Line EIS Project

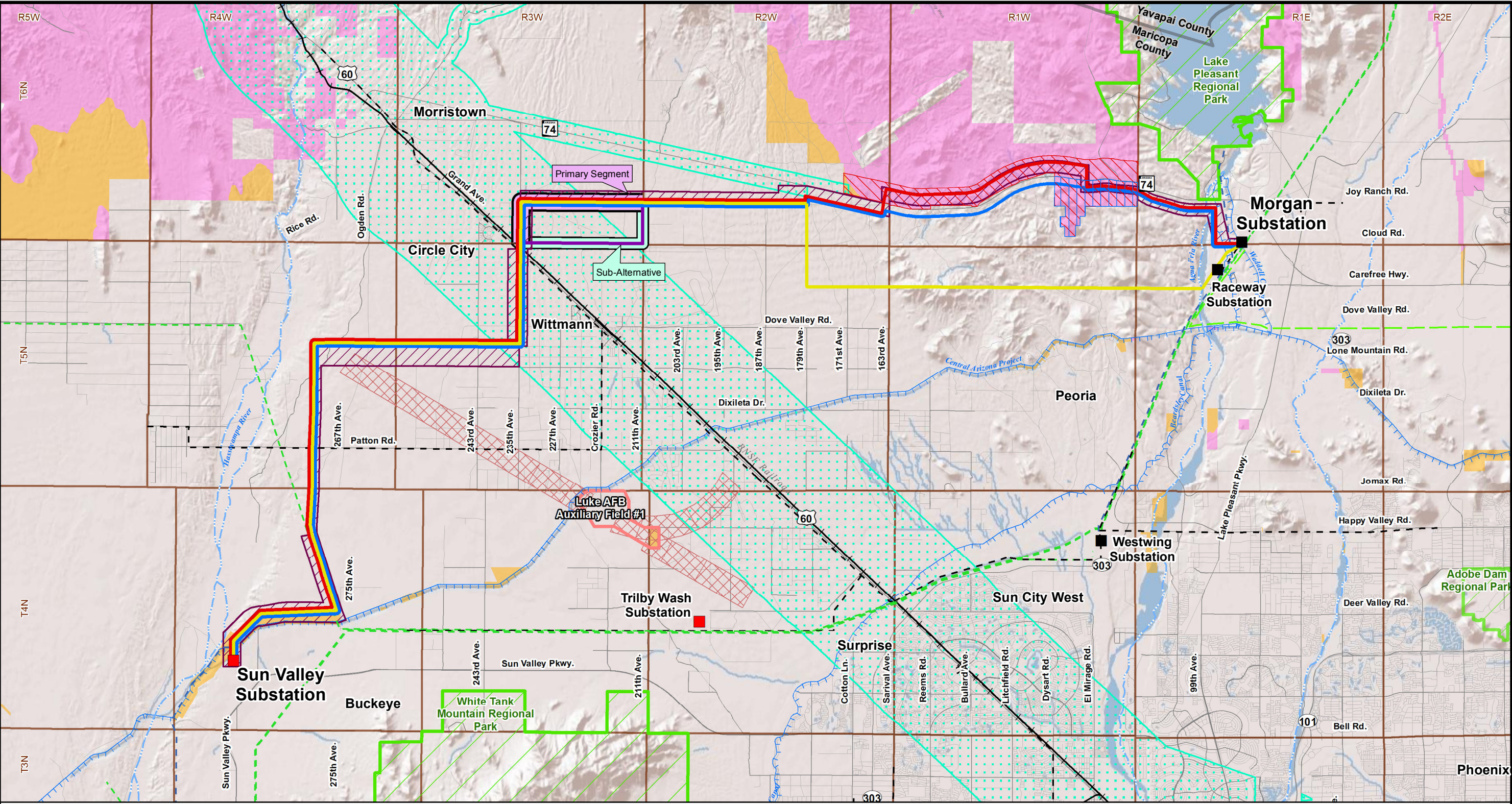












**Legend**

- |  |  |  |
|--|--|--|
| Sun Valley to Morgan Proposed Action Right-of-Way      | Existing High-Voltage Substation             | Regional Park  |
| Alternative 1 Proposed Action with Additional Corridor | Approved High-Voltage Substation             | Maricopa County Scenic Corridor  |
| Alternative 2 South of SR 74                           | Existing 500kV Transmission Line             | <b>Scenic Quality Classification</b>   |
| Alternative 2 Corridor South of SR74                   | Existing 230kV Transmission Line             | B (Moderate)   |
| Alternative 3 Carefree Highway                         | Existing 69kV Transmission Line              | C (Low)  |
| Sub-alternative: State Trust Land Route Variation      | Luke Air Force Base (AFB) Auxiliary Field #1 | <small>*Based on the results of the inventory, no lands in the project area received a Scenic Quality Classification of A.</small> |
| ACC Certified Route                                    | Auxiliary Field #1 Accident Potential Zone   |  |

Base Map: ESRI Shaded Relief accessed at ArcGISOnline.com  
VRI: BLM 2010

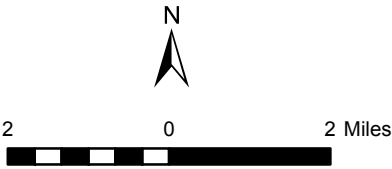
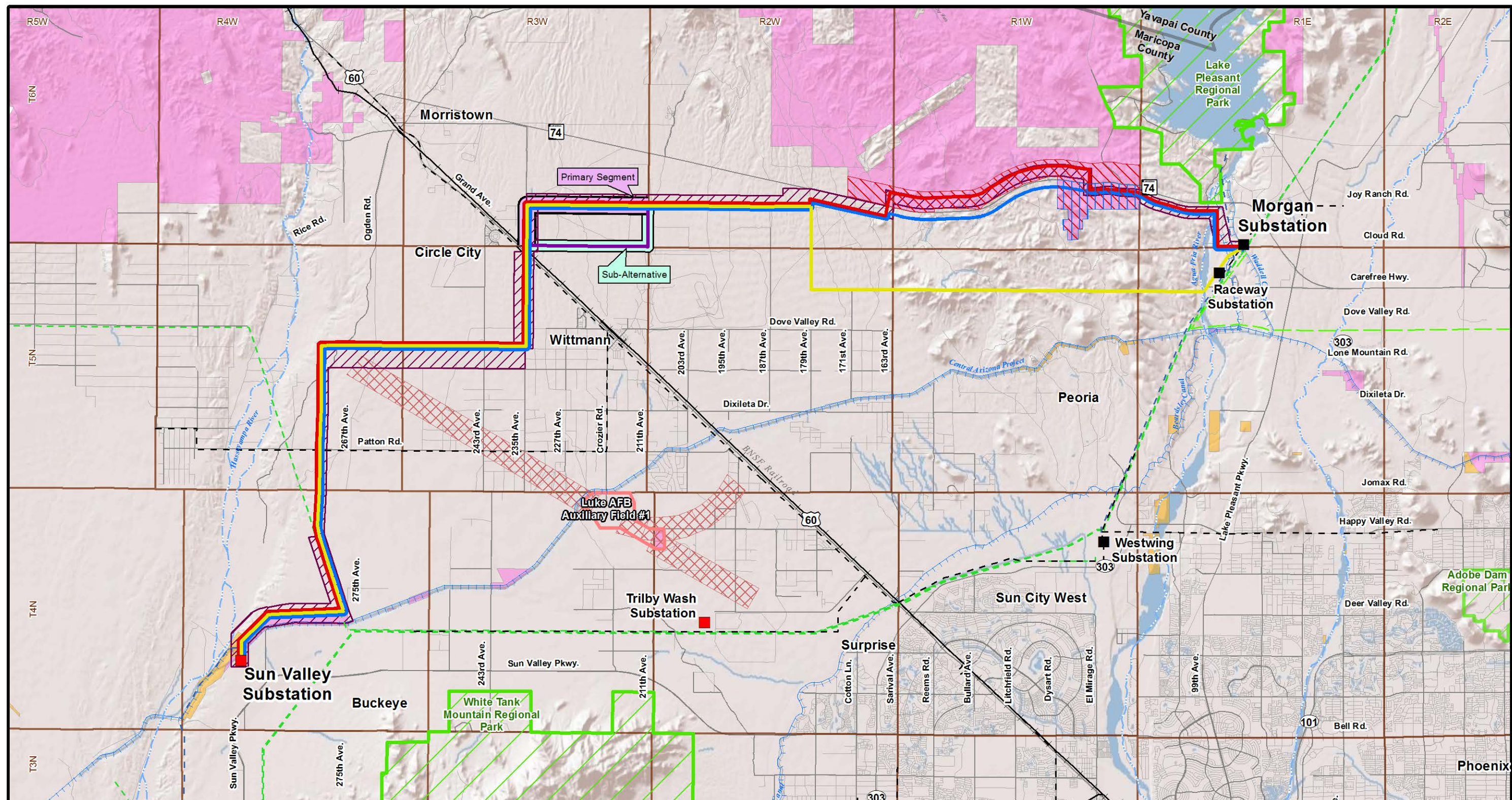


Figure 3.14-1  
Scenic Quality Ratings  
Sun Valley to Morgan 500/230kV Transmission Line EIS Project





# Legend

- Sun Valley to Morgan Proposed Action Right-of-Way
- ▨ Alternative 1 Proposed Action with Additional Corridor
- ▨ Alternative 2 South of SR 74
- ▨ Alternative 2 Corridor South of SR74
- Alternative 3 Carefree Highway
- Sub-alternative: State Trust Land Route Variation
- ▨ ACC Certificated Route
- Existing High-Voltage Substation
- Approved High-Voltage Substation
- Existing 500kV Transmission Line
- Existing 230kV Transmission Line
- Existing 69kV Transmission Line
- ▨ Luke Air Force Base (AFB) Auxiliary Field #1
- ▨ Auxiliary Field #1 Accident Potential Zone

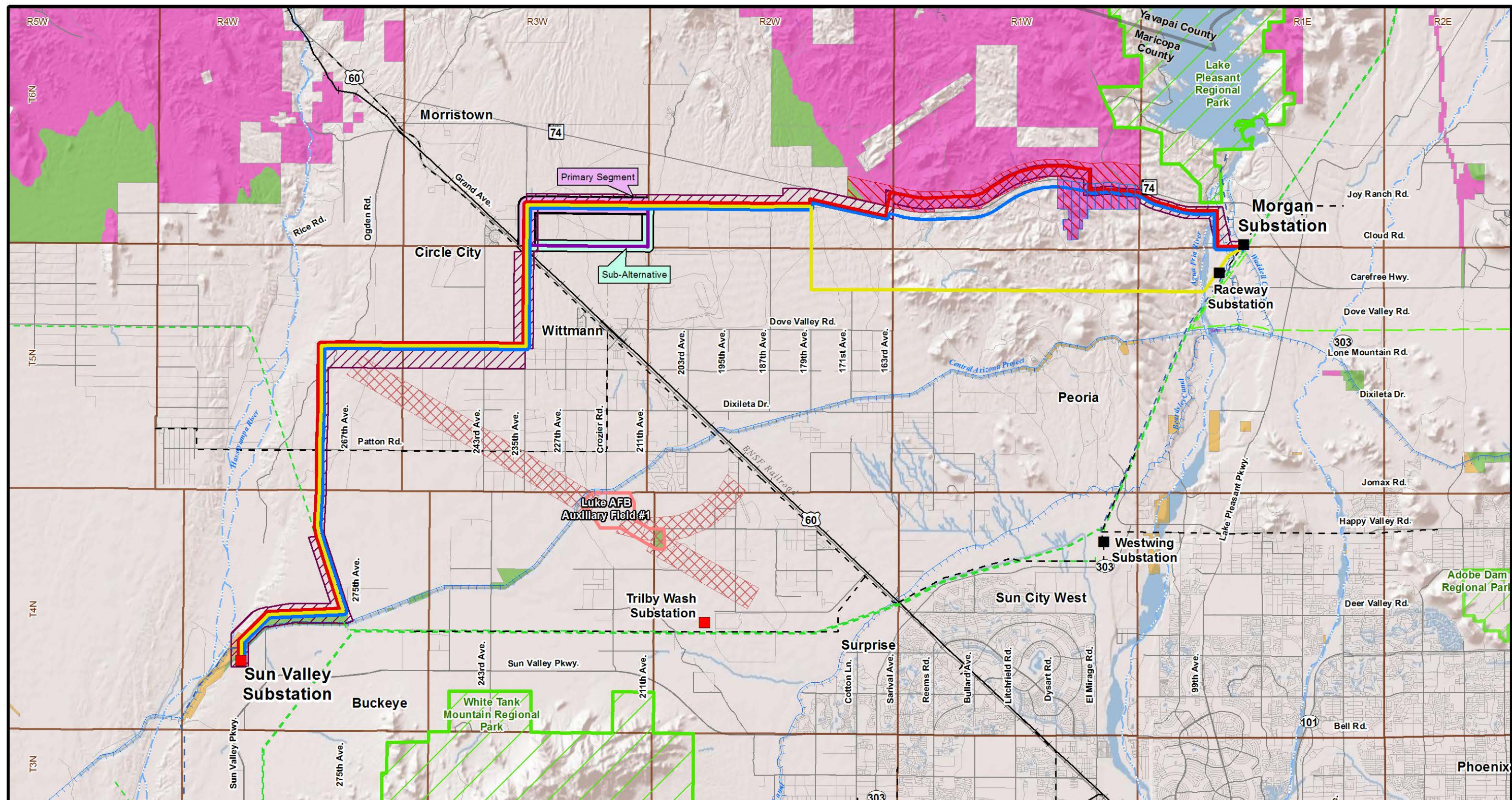
- ▨ Regional Park
- Sensitivity Level Classification**
- ▨ High
- ▨ Low



Base Map: ESRI Shaded Relief accessed at ArcGISOnline.com  
VRI: BLM 2010

Figure 3.14-2  
Viewer Sensitivity  
Sun Valley to Morgan 500/230kV Transmission Line EIS Project





**Legend**

<ul style="list-style-type: none"> <li>Sun Valley to Morgan Proposed Action Right-of-Way</li> <li>Alternative 1 Proposed Action with Additional Corridor</li> <li>Alternative 2 South of SR 74</li> <li>Alternative 2 Corridor South of SR74</li> <li>Alternative 3 Carefree Highway</li> <li>Sub-alternative: State Trust Land Route Variation</li> <li>ACC Certified Route</li> </ul>	<ul style="list-style-type: none"> <li>Existing High-Voltage Substation</li> <li>Approved High-Voltage Substation</li> <li>Existing 500kV Transmission Line</li> <li>Existing 230kV Transmission Line</li> <li>Existing 69kV Transmission Line</li> <li>Luke Air Force Base (AFB) Auxiliary Field #1</li> <li>Auxiliary Field #1 Accident Potential Zone</li> </ul>	<ul style="list-style-type: none"> <li>Regional Park</li> <li><b>Visual Resource Inventory Classification</b></li> <li>II</li> <li>III</li> <li>IV</li> </ul>
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\*Based on the results of the inventory, no lands in the project area received a Class I classification.

Base Map: ESRI Shaded Relief accessed at ArcGISOnline.com  
VRI: BLM 2010

**Figure 3.14-3**  
**VRI Classification**  
**Sun Valley to Morgan 500/230kV Transmission Line EIS Project**



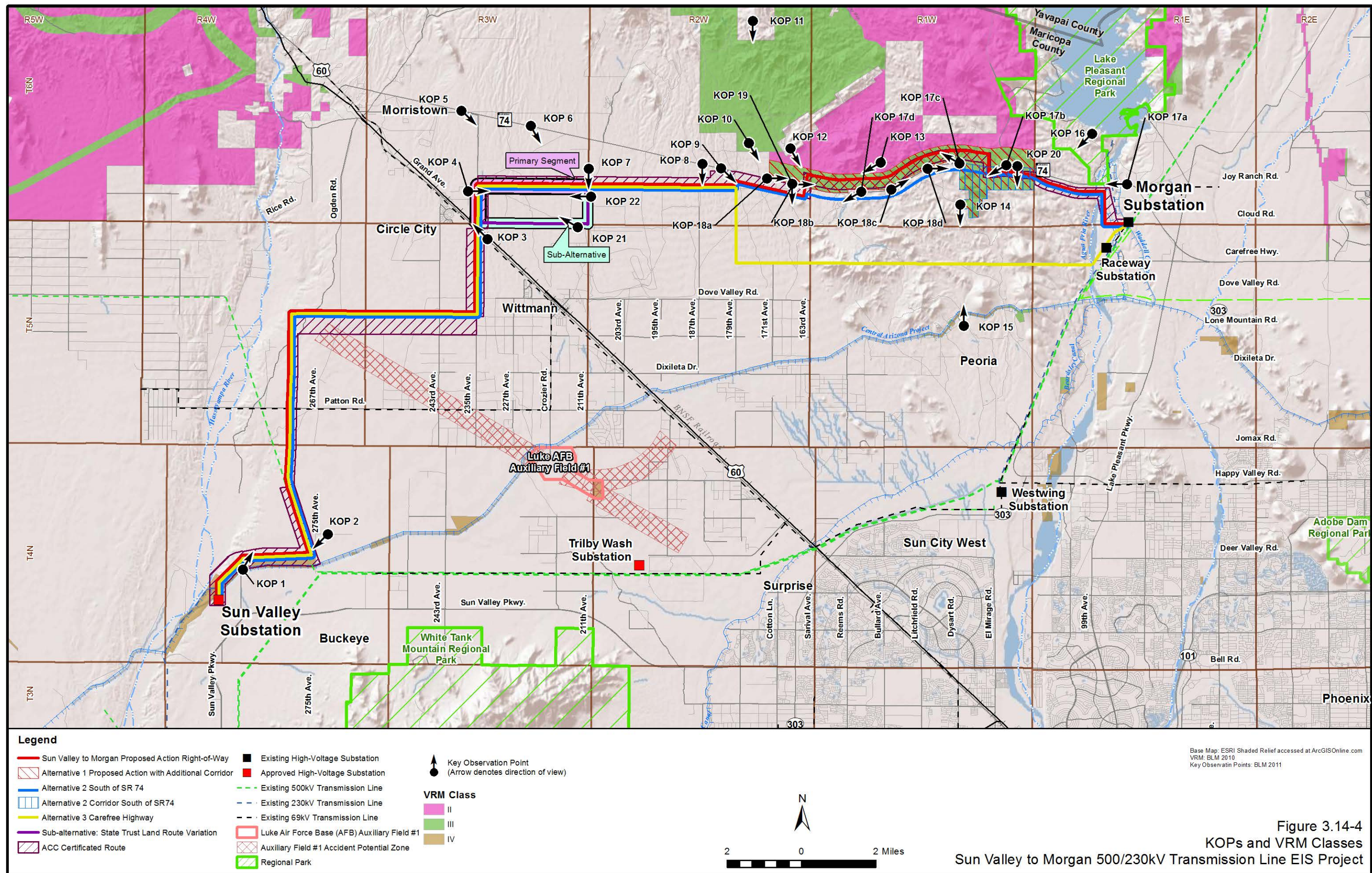
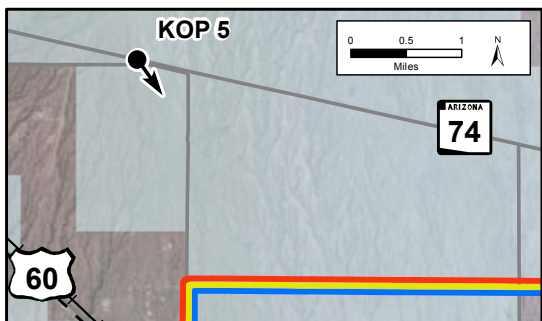


Figure 3.14-4  
 KOPs and VRM Classes  
 Sun Valley to Morgan 500/230kV Transmission Line EIS Project





### Legend

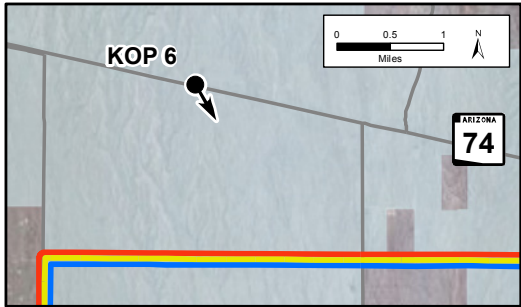
- Key Observation Point
- Sun Valley to Morgan Proposed Action Right-of-Way
- Alternative 2 South of SR 74
- Alternative 3 Carefree Highway
- Existing 69kV Transmission Line
- Major Roads
- Surface Land Management**
  - State
  - Private

### Photograph Information










Time of photograph: 2:54 PM  
 Date of photograph: 12-6-11  
 Weather condition: Clear  
 Viewing direction: Southeast  
 Latitude: 33°51'19.33"N  
 Longitude: 112°34'34.24"W  
 Camera: Nikon D700  
 Lens: 50mm  
 Lighting condition: Sidelit

Figure 3.14-5  
 Existing Conditions  
 from Key Observation Point 5  
 Sun Valley to Morgan 500/230kV  
 Transmission Line EIS Project





### Legend

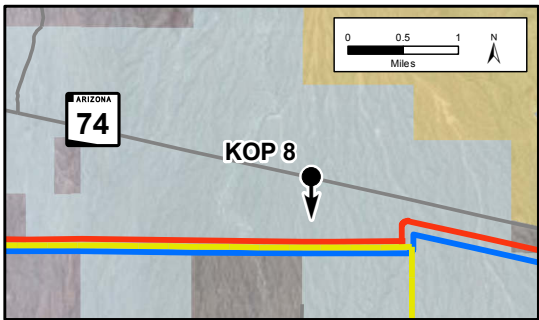
-  Key Observation Point
-  Major Roads
-  Surface Land Management
-  State
-  Private
-  Sun Valley to Morgan Proposed Action Right-of-Way
-  Alternative 2
-  Alternative 3
-  Carefree Highway

### Photograph Information









Time of photograph: 2:37 PM  
 Date of photograph: 12-6-11  
 Weather condition: Clear  
 Viewing direction: Southeast  
 Latitude: 33°50'58.73"N  
 Longitude: 112°32'36.79"W  
 Camera: Nikon D700  
 Lens: 50mm  
 Lighting condition: Sidelit

Figure 3.14-6  
 Existing Conditions  
 from Key Observation Point 6  
 Sun Valley to Morgan 500/230kV  
 Transmission Line EIS Project





### Legend

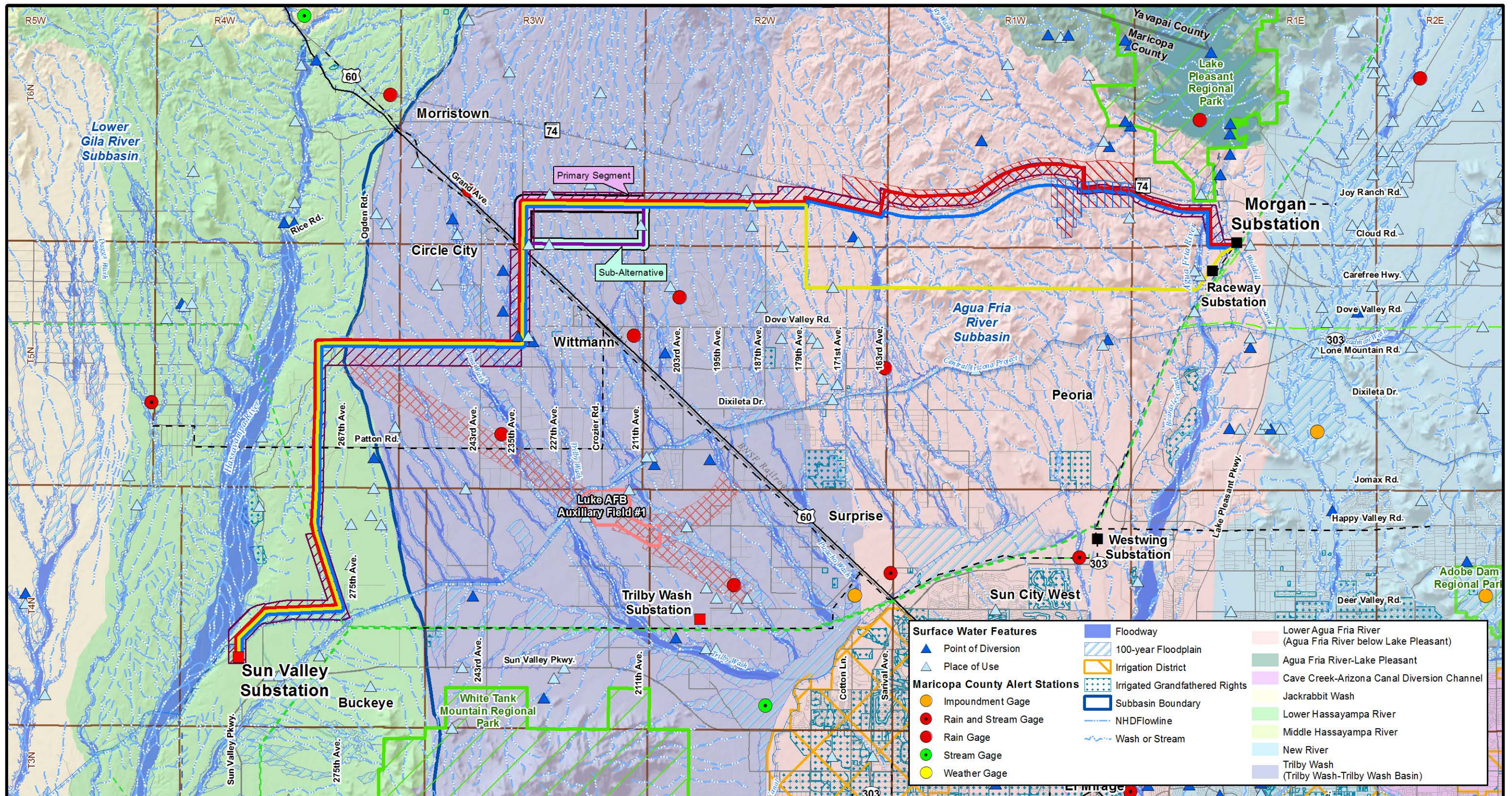
-  Key Observation Point
-  Sun Valley to Morgan Proposed Action Right-of-Way
-  Alternative 2 South of SR 74
-  Alternative 3 Carefree Highway
-  Major Roads
- Surface Land Management**
  -  Bureau of Land Management
  -  State
  -  Private

### Photograph Information

Time of photograph: 11:56 AM  
 Date of photograph: 10-19-11  
 Weather condition: Clear  
 Viewing direction: South  
 Latitude: 33°50'6.55"N  
 Longitude: 112°27'46.71"W  
 Camera: Nikon D700  
 Lens: 50mm  
 Lighting condition: Backlit

Figure 3.14-7  
 Existing Conditions  
 from Key Observation Point 8  
 Sun Valley to Morgan 500/230kV  
 Transmission Line EIS Project





Base Map: ESRI Shaded Relief accessed at ArcGISOnline.com  
 Arizona State Land Department: 2007-2010  
 ADWR: 2008-2011  
 FCDMC: 2008  
 FEMA: 2005

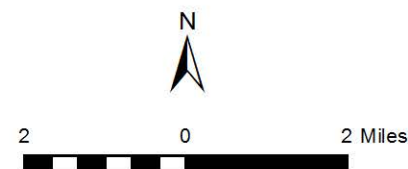
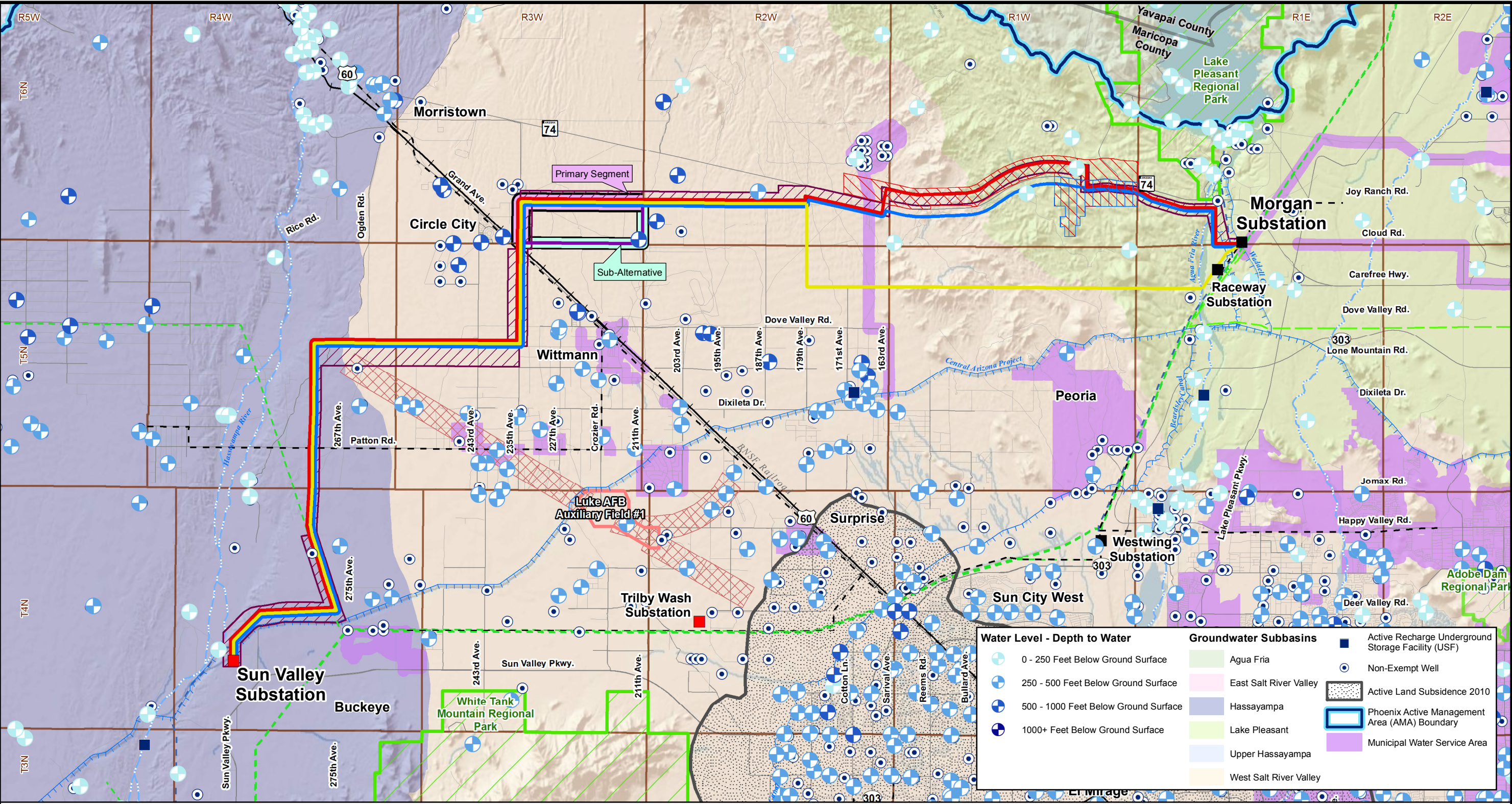


Figure 3.15-1  
 Surface Water Resources  
 Sun Valley to Morgan 500/230kV Transmission Line EIS Project





**Water Level - Depth to Water**

- 0 - 250 Feet Below Ground Surface
- 250 - 500 Feet Below Ground Surface
- 500 - 1000 Feet Below Ground Surface
- 1000+ Feet Below Ground Surface

**Groundwater Subbasins**

- Agua Fria
- East Salt River Valley
- Hassayampa
- Lake Pleasant
- Upper Hassayampa
- West Salt River Valley

- Active Recharge Underground Storage Facility (USF)
- Non-Exempt Well
- Active Land Subsidence 2010
- Phoenix Active Management Area (AMA) Boundary
- Municipal Water Service Area

- Legend**

  - Sun Valley to Morgan Proposed Action Right-of-Way
  - Alternative 1 Proposed Action with Additional Corridor
  - Alternative 2 South of SR 74
  - Alternative 2 Corridor South of SR74
  - Alternative 3 Carefree Highway
  - Sub-alternative: State Trust Land Route Variation
  - ACC Certificated Route
  - Existing High-Voltage Substation
  - Approved High-Voltage Substation
  - Existing 500kV Transmission Line
  - Existing 230kV Transmission Line
  - Existing 69kV Transmission Line
  - Luke Air Force Base (AFB) Auxiliary Field #1
  - Auxiliary Field #1 Accident Potential Zone
  - Regional Park

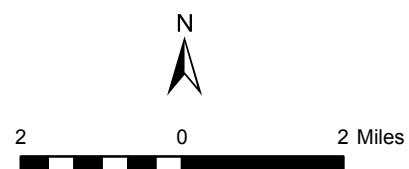


Figure 3.15-2  
Groundwater Resources  
Sun Valley to Morgan 500/230kV Transmission Line EIS Project

Base Map: ESRI Shaded Relief accessed at ArcGISOnline.com  
Arizona State Land Department: 2007-2010  
ADWR: 2008-2011



